



# Research and evidence in suicide prevention



Australian Government  
Department of Health and Ageing

*Living Is For Everyone (LIFE) Framework (2007)*

ISBN: 1-74186-296-5

Online ISBN: 1-74186-297-3

Publications Number: P3 -2060

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*The Australian Government Department of Health and Ageing has financially supported the production of this review/publication. While every effort has been made to ensure that the information contained in the review/publication is accurate and up-to-date at the time of publication, the department does not accept responsibility for any errors, omissions or inaccuracies.*



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# Foreword

In 2006, an independent review and consultation with key stakeholders on the *LIFE Framework (2000)* was commissioned. *LIFE (2007)* is the result of the review. It provides a national framework for action based on the best available evidence to guide population health approaches and prevention activities. It reflects a vision that suicide prevention activities will reduce suicide attempts and the loss of life through suicide by providing individuals, families and communities with access to support so that no-one in crisis or experiencing personal adversity sees suicide as their only option.

The new *LIFE Framework (2007)* has been developed in recognition of the widely differing audiences, each with a need for practical yet informed guidance on suicide prevention.

The purpose of the *LIFE (2007)* materials is to provide information, resource materials and strategies that will support population health approaches and suicide prevention activities undertaken across the Australian community and thereby contribute to a reduction in suicide and suicide attempts.

The *LIFE Framework (2007)* outlines suicide prevention activities, programs and interventions that reflect Universal, Selective and Indicated approaches that aim to build:

- stronger individuals, families and communities;
- individual and group resilience to traumatic events;
- the capability for communities and individuals to identify and respond quickly and appropriately to people in need; and
- a coordinated response for the provision of care and support to individuals and for smooth transitions to and between care.

The components of the new *LIFE (2007)* suite of materials are:

- *Living Is For Everyone: A Framework for Prevention of Suicide in Australia*, which outlines the vision, purpose, principles, action areas, and proposed outcomes for suicide prevention in Australia. It replaces the *Living is For Everyone (LIFE) Framework (2000)*. The revised *Living Is For Everyone Framework* is based on the understanding that:
  - suicide prevention activities will first, do no harm;
  - that there will be community ownership and responsibility for action to prevent suicide; and
  - that service delivery will be client-centred.
- *Living Is For Everyone: Research and Evidence in Suicide Prevention* (this document), sets the context for suicide prevention activity, summarising current research, evidence and statistics relating to suicide and suicide prevention in Australia.
- *Living Is For Everyone: Practical Resources for Suicide Prevention* is a set of fact sheets, organised around topic areas, providing practical information about suicide prevention. The broad grouping of the topic areas are:
  - About Suicide and Suicide Prevention;
  - Conducting Suicide Prevention Activities and Programs; and
  - Suicide Prevention Interventions (*Universal, Selective, Indicated*).

# Introduction

Australia was one of the first countries to develop a national strategic approach to suicide prevention. The first focus was on youth suicide; in the 1995–1996 Federal Budget, \$13 million was allocated over four years to develop and implement a national plan for youth in distress. In the following year, a further \$18 million was allocated to the National Youth Suicide Prevention Strategy, with a total of \$31 million allocated between 1995 and 1999.

In 2000, the (then) National Youth Suicide Prevention Strategy was expanded into the *Living Is For Everyone: A Framework for Prevention of Suicide and Self-harm in Australia (the LIFE Framework 2007)*. It provided a strategic framework for national action to prevent suicide and promote mental health and resilience across the Australian population, within the National Suicide Prevention Strategy (NSPS).

The *LIFE Framework (2000)* consisted of a package of three related documents:

- *Learnings about suicide* (covering the research and evidence relating to suicide and self-harm in Australia);
- *A framework for the prevention of suicide and self-harm in Australia* (outlining goals, principles and action areas); and
- *Building partnerships* (describing the many suicide prevention activities, projects and programs and government policies across Australia).

In early 2006 an independent review including consultation with key stakeholders on the *LIFE Framework* was commissioned. The review revealed the need for more practical documents and resources to assist the wider community in suicide prevention.

The consultations involved the wider Australian community and included academics and researchers, policy makers, government departments, peak bodies, health and other professionals, carers, special interest groups, service providers, local communities, and people bereaved by suicide. The consultations were supplemented by a wider canvassing of the most recent international and national research.

The new *Living Is For Everyone (LIFE) Framework (2007)* was developed with extensive consultation over six months from January to June 2007. These consultations confirmed many of the findings from the independent review undertaken in 2006: significantly, whilst the suicide prevention sector held the *LIFE Framework* documents in very high regard, most people reported that they rarely referred to them or used them. There were also many individuals, service providers, local community organisations, all of whom were dealing with suicide prevention, who had not seen the *LIFE Framework* documents.

It became apparent that there was a need for the redeveloped *LIFE Framework* resources to be made more accessible in terms of content, language, presentation and dissemination. Like the National Youth Suicide Prevention Strategy before it, the *LIFE Framework* resources were seen as making an important historical and contextual contribution to the developing field of suicide prevention, contributing to the growth and learning of the sector over time.

## Introduction (continued)

The review made recommendations for changes to the documents including:

- clarifying the purpose of the *LIFE Framework* and ensuring that the information and the way it is presented reflects a focus on practical implementation of suicide prevention activities;
- revising materials to ensure they are reflective of a diverse Australia and of new initiatives and developments in suicide prevention including those arising from the July 2006 Council of Australian Governments (COAG) Agreement: the National Action Plan on Mental Health. A key element of the National Action Plan is the commitment from the Australian Governments to double funding for the National Suicide Prevention Strategy (from \$61 million to \$123 million) to enable the expansion of suicide prevention programs, particularly those targeting groups at high risk in the community; and
- amending content to provide a more comprehensive coverage of suicide prevention issues which includes expanding information on areas such as self-harm, resilience and protective factors.

Following these recommendations and based on the previous reviews of the *LIFE Framework*, the new *LIFE (2007)* suite of documents was produced with three main components:

- *Living Is For Everyone: Research and Evidence in Suicide Prevention* (this document) sets out the context for suicide prevention activity, summarising the current theories, research, evidence and statistics relating to suicide and suicide prevention in Australia;
- *Living Is For Everyone: A Framework for Prevention of Suicide in Australia* outlines the vision, purpose, action areas and evaluation framework for suicide prevention in Australia;
- *Living Is For Everyone: Practical Resources for Suicide Prevention* contains fact sheets summarising the key issues in suicide prevention, and documents resources in suicide prevention that are currently available.

The *LIFE (2007)* resources aim to contribute to the prevention of suicide in Australia through up-to-date research and evidence, clear communication of this information, and a logical strategy for action and practical resources for all Australians.

The *LIFE (2007)* resources build on and update the *LIFE Framework (2000)*. In the six years since the first *LIFE Framework* was produced, there have been significant improvements in the range and type of research and data that are relevant to suicide prevention. The resources draw on those materials.

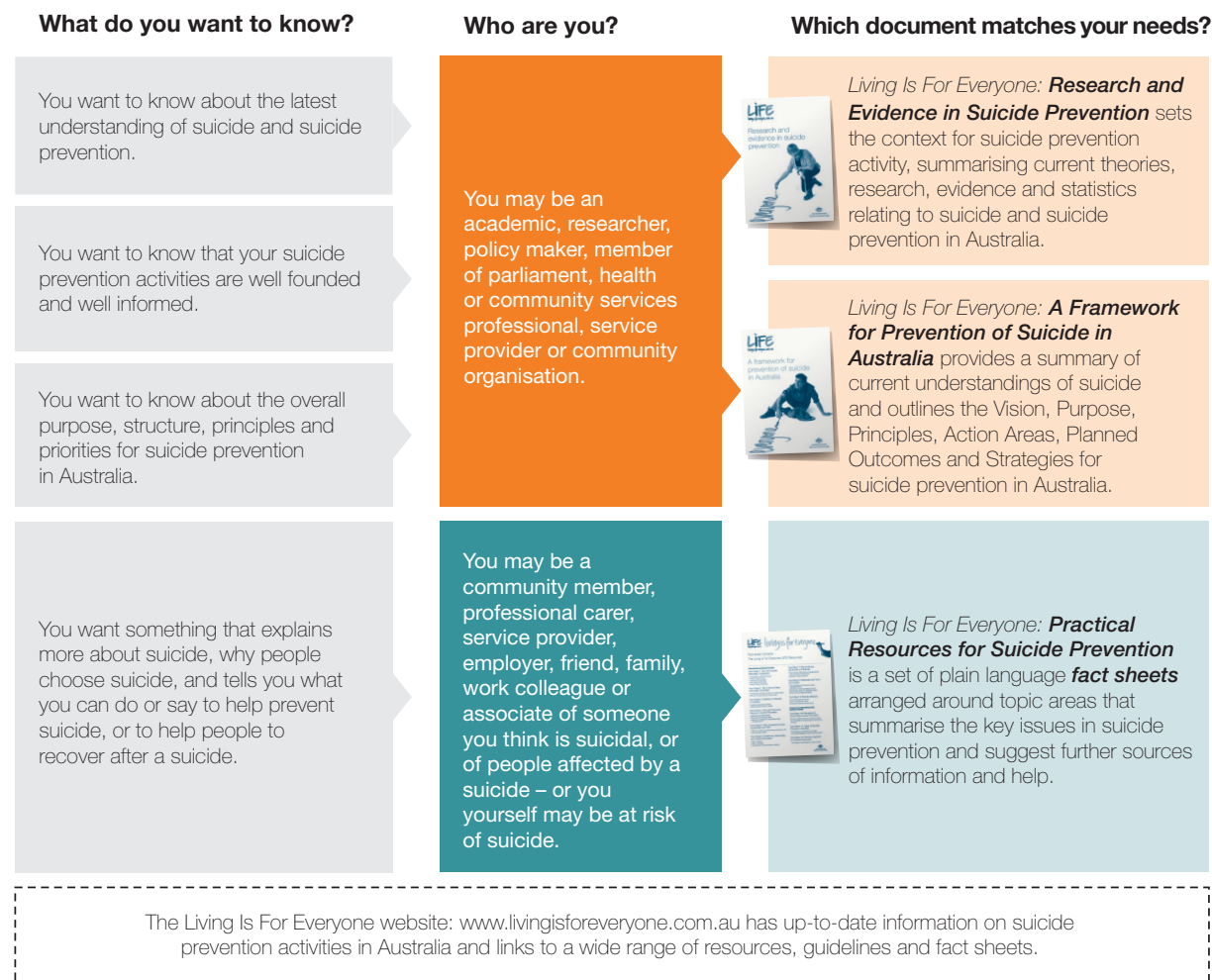
The documents have been developed to meet the requirements of a broader suicide prevention community that includes local service providers, families, community members, work colleagues – people who often see the first signs of a potential suicide.

The style of the documents reflect this intent with academic and scientific styles minimised. The focus of the resources is predominantly on suicide prevention and less on extensive statistics and information about suicide itself (unless those statistics offer insights into suicide prevention).

The three companion documents of the *LIFE (2007)* materials are linked in terms of content and coverage and there is some repetition across the documents since each one is designed for a slightly different target audience as shown in the **Figure 1**.



FIGURE 1: Using the Living Is For Everyone resources



# About suicide and suicide prevention

## What is understood by the term 'suicide'

A death is classified as a 'suicide' by a coroner based on evidence that a person died as a result of a deliberate act to cause his or her own death. If there is contrary evidence, a coroner may classify the death as having been caused by someone else, or as accidental. If there is insufficient evidence, the coroner may not be able to reach a decision on the cause of death.

Suicide is almost always a very private act, although the legacy of suicide and its impact on those who are left behind may be very public and powerful. The attitudes of those left behind after a suicide range from confusion, through guilt, to anger and condemnation and they often struggle to understand the person's motivation.<sup>2</sup>

Other commonly used references associated with 'suicide' include 'suicide attempts', 'suicide threats', 'suicide plan', suicide-related 'behaviours', 'ideations' and 'communications', 'self-harm' and 'self-inflicted unintentional death'.

## What we know about why people choose to take their own lives

This is a question that has been asked over millennia, in the writings of philosophers, religious leaders, sociologists, physicians and many others. In an attempt to find an answer researchers have gathered information in recent times from people who have considered or attempted suicide, and from families and health professionals connected to people who have suicided. Despite this ongoing inquiry there is no single or definitive answer, and no simple explanations are available about why people choose to take their own life.



Edwin Schneidman, has suggested that suicide is 'chiefly a drama in the mind'<sup>3</sup> and that people become suicidal when their vital needs (such as their need for achievement and nurturing) are frustrated. A common goal appears to be to escape intolerable pain or feelings of hopelessness or ambivalence about life. As the person becomes increasingly focussed on their problem, they can see no other option than to take their own life. In this situation, the positive and negative aspects of the person's environment are critical to his or her survival.<sup>4</sup> Suicide may also involve a desire to convey a message, and it may include symbolic gestures linked to the chosen method and/or the location of the suicide.

Several researchers have attempted to develop a classification for suicide, with concepts such as escapist suicides, aggressive suicides, revenge suicides, self-destructive suicides, and suicides to 'prove oneself'.<sup>5 6 7</sup>

For some, suicide may be an impulsive and irrational act. For some it may be a carefully considered choice, particularly where the person believes that his or her death will benefit others. Some people take their own life or harm themselves apparently without warning; some give some indication of suicidal intent, especially to friends and loved ones, but also to health professionals.

The most recent theories about the types of suicide and different motivations to suicide suggest that it may be any one or combination of the examples below:

- a direct result of a mental illness, such as clinical depression or schizophrenia. However, many people with a mental illness are not affected by suicidal thoughts or behaviour, and not everyone who suicides is mentally ill;
- an outcome of reckless behaviour or impaired judgement. Suicide is, for example, often associated with alcohol or other drugs, or it may result from dangerous or life-threatening activities. Such behaviour is sometimes referred to as a 'death wish';
- an attempt to end unmanageable pain. It may be psychological pain and despair, stemming from guilt, shame, or loss; or it may be chronic physical pain or debilitating illness;
- an attempt to send a message or gain a particular outcome such as notoriety, vengeance, defiance, or leave a particular legacy or aftermath;
- an altruistic or heroic act, relieving others of a burden, dying to save another, or dying for a cause; and/or
- an expression of the person's right to choose the manner of their death. And in some circumstances, the specific means or place of suicide has particular symbolic significance to the person.

There is a complex interrelationship of risk and protective factors that impacts on someone's decision to take their own life. These are considered in the following section.

# Suicide risk and protective factors for suicide

## Challenges in suicide prevention

Many factors help to shape a person's self-image, life skills and ability to cope under pressure or when faced by life-changing circumstances. These factors include genetic make-up, previous life and family experiences, current and past physical and mental health, a range of cultural and gender-related factors, and a person's social support systems. Each individual is born with a unique genetic and biological make-up, into an existing family and social situation, and into a culture, a socio-economic circumstance, and a geographic location. All these factors predispose a person towards certain attitudes, beliefs and behaviours which may also change as circumstances change. The challenge in suicide prevention is to understand which components of these factors (individual, social, contextual) will help to lessen a person's adverse reaction to difficult events, and to identify which individuals are most likely to be badly affected by adverse life events and which are most likely to be resilient.

## What we know about risk and protective factors for suicide

The reasons that people choose to take their own life are very complex. The many factors that influence whether someone is likely to be suicidal are known as:

- *risk factors*, sometimes called 'vulnerability factors' because they increase the likelihood of suicide-related behaviours; and
- *protective factors*, which reduce the likelihood of suicide-related behaviours and work to improve a person's ability to cope with difficult circumstances.

*Risk and protective factors* are often at opposite ends of the same continuum. For example, social isolation (*risk factor*) and social connectedness (*protective factor*) are both extremes of social support.

*Risk and protective factors* can occur:

- at the *individual or personal level* and include mental and physical health, self-esteem, and ability to deal with difficult circumstances, manage emotions, or cope with stress;
- at the *social level*, which includes relationships and involvement with others such as family, friends, workmates, the wider community and the person's sense of belonging;
- at the *contextual level or the broader life environment level* which includes the social, political, environmental, cultural and economic factors that contribute to available options and quality of life.

*Risk and protective factors* may be:

- *modifiable* - things we can change; and
- *non-modifiable* - things we cannot change.

For example, in some areas of Australia there is a high incidence of suicide in isolated older men. Nothing can be done about their age or gender (non-modifiable factors that increase risk), but it is possible to change their geographical location or their social isolation (modifiable factors).

People who attempt to take their own life usually have many *risk factors* and few *protective factors*. However, *risk and protective factors* don't explain everything about suicide. Most people with multiple *risk factors* do not attempt to take their own life, and some who do take their life have few *risk factors* and many *protective factors*. Particular *risk factors* are more important for some groups than others. For example, the factors that may put a young man at risk are generally quite different to those that increase the risk for a retired, older man.



There may be a number of reasons why there is not a straight one-to-one relationship between reduced risk and the presence of *protective* and/or *risk factors*, including:

- The same life event can have very different impacts on individuals, depending on what else is happening in a person's life at the time and their ability to grow and learn from life's challenges. To assist someone who is feeling suicidal it is critical to understand their sense of self, their ability to cope and their personal competence.
- People vary widely in their beliefs about what makes life worth living, and these views may also change over time. To date, researchers have not yet been able to explain how and why these differences occur.

- A further challenge lies in the strong relationship between socio-economic factors and health. At present in Australia, there is a strong link between geographic location (regional, rural and remote), socio-economic disadvantage (low socio-economic status) and ill health. This relationship also exists for suicide, and rates of suicide tend to be much higher in regional, rural and remote locations and in areas of higher socio-economic disadvantage.

**Figure 2** outlines some of the known *risk* and *protective factors* associated with suicide<sup>8-10</sup>, but *risk* and *protective factors* can never tell the whole story. It is critically important to remember how complex suicide is. A list of *risk* and *protective factors* can provide a guide at the community level, and can inform effective local action. However, it tells us little about individuals and it can never provide an individual 'check list'.

**FIGURE 2:** Examples of risk and protective factors

	Risk factors for suicide	Protective factors for suicide
Individual	gender (male) mental illness or disorder chronic pain or illness immobility alcohol and other drug problems low self-esteem little sense of control over life circumstances lack of meaning and purpose in life poor coping skills hopelessness guilt and shame	gender (female) mental health and wellbeing good physical health physical ability to move about freely no alcohol or other drug problems positive sense of self sense of control over life's circumstances sense of meaning and purpose in life good coping skills positive outlook and attitude to life absence of guilt and shame
Social	abuse and violence family dispute, conflict and dysfunction separation and loss peer rejection social isolation imprisonment poor communication skills family history of suicide or mental illness	physical and emotional security family harmony supportive and caring parents/family supportive social relationships sense of social connection sense of self-determination good communication skills no family history of suicide or mental illness
Contextual	neighbourhood violence and crime poverty unemployment, economic insecurity homelessness school failure social or cultural discrimination exposure to environmental stressors lack of support services	safe and secure living environment financial security employment safe and affordable housing positive educational experience fair and tolerant community little exposure to environmental stressors access to support services

## Applying a knowledge of risk factors to suicide prevention

Applying an understanding of risk factors to prevent suicide involves identifying:

- existing risk factors (individual, social, contextual) that are present for a particular person or group of people;
- individuals who are most likely to be badly affected by these risk factors, and those who are most likely to be resilient; and
- which of the risk factors can be changed (modifiable) to reduce the level of risk.

The most recent research suggests that an understanding of risk factors in suicide is best used to identify populations or specific groups that might be at risk, rather than attempting to identify individuals at risk. The main reason is that the majority of people who can be categorised as 'at risk' do not and will not ever choose to take their own life. It is extremely difficult to determine from risk factors alone which individuals within an 'at risk' group are more or less likely to become suicidal.

Most researchers recommend that suicide prevention initiatives should focus on constellations of risk and protective factors. Activities may include:

- *reducing exposure to social and contextual risk* through structural changes that target specific 'at risk' groups such as remote Indigenous communities, socially or geographically isolated older men or people with a mental illness. For example, developing social support networks, improved employment prospects or access to affordable housing.
- *increasing individual protective factors* through activities that help to build self-esteem, psychological strength and personal competence. For example, teaching young people social and emotional skills, fostering positive peer relationships and relationships with teachers and other adults, and encouraging help-seeking behaviours.
- *providing easier access to appropriate care and support* that is in the right place, at the right time, using the right approach. For example, non-judgemental assistance for people bereaved by suicide provided by their peers, in the places they frequent and where they feel most comfortable.
- *reducing risk and increasing protection* for people who are in current crisis. Such groups might include those who have attempted to take their own life, or who have been recently discharged from mental health care.

## Applying a knowledge of protective factors to suicide prevention

Suicide research has historically concentrated overwhelmingly on understanding risk factors (those that increase vulnerability or exposure to suicidal thinking).<sup>11-21</sup> Only relatively recently have protective factors become a focus in suicide prevention, to understand better what builds resilience and the ability to cope with adverse life events.<sup>22-34</sup> After many years of concentrating on human illnesses and weaknesses, the scientific study of human behaviour now includes an emphasis on understanding what makes people strong – the factors that make life worth living and the factors that build individual health and wellbeing.<sup>35</sup>

Human behaviour is shaped both by factors within the person and by the person's environment. Each person's 'life space' includes their physical and social environment, their past experiences, and their hopes, dreams and fears.<sup>36</sup> Life's different roles demand different attitudes and different behaviours – as a parent, a worker, a student, a mentor, a colleague or a friend. Everyone faces new challenges and often encounters stress as they juggle the many different roles and the associated expectations, responsibilities and events.<sup>37</sup> However the same life event can have a very different impact on different people, depending on the context and the person's capacity to adjust to changing life circumstances, including adverse events.

There have been, and will continue to be, many theories about what makes each person who he or she is, and what gives an individual the resilience to cope with and bounce back from adverse life events. It has been suggested that there are four different ways in which individuals respond to potentially traumatic events: resilience accompanied by mild disruption (about 60% of people), initial shock followed by recovery over time (about 20% of people), delayed intense emotional reaction (about 10% of people), and chronic disruption and ongoing mental disorder (about 10% of people).<sup>38</sup>



## The importance of health and wellbeing in suicide prevention

From birth, each person develops his or her sense of self and unique ways of coping with life. There have been many theories about how individuals develop and build their resilience and attitude to life.<sup>39</sup> **Figure 3** summarises the main building blocks for what makes each person who they are.<sup>40-44</sup> It is generally accepted that these building blocks related to a person's sense of self, social skills, sense of purpose, emotional stability, problem solving skills and physical health work together to strengthen and prepare the individual for life's challenges.

External factors and experiences such as family life and social interactions also influence a person's reaction to difficult circumstances. Accumulated experiences from the past (cultural, social, family), and anticipation of the future (expectations, hopes, dreams and fears) all impact on the individual's ability to manage the range of events that can occur throughout life. **Figure 4** summarises the four main groups of factors that work together to build individual resilience and the capacity to manage situations that may cause anxiety or emotional instability.

The key social support systems that assist in building individual resilience and capacity to respond positively to adverse life events are:

- support of family and friends;
- positive and supportive relationships;
- social connectedness (neighbourhood, local community, peer groups);
- community understanding and support during times of adversity;
- safe and secure support environments (non-threatening, empathetic);
- sensitive professional carers, general practitioners, mental health workers, hospital emergency service personnel;
- a quick response capability within the community in times of adversity; and
- coordinated and integrated service delivery and support from local service providers.

**FIGURE 3:** Factors that contribute to individual health and wellbeing

	Individual health and wellbeing
<b>Self-image</b>	Sense of self includes: Self-esteem; secure identity; ability to cope; and mental health and wellbeing.
<b>Behaviour</b>	Social skills include: Life skills; communication; flexibility; and caring.
<b>Spirit</b>	Sense of purpose includes: Motivation; purpose in life; spirituality; beliefs; and meaning.
<b>Heart</b>	Emotional stability includes: Emotional skills; humour; and empathy.
<b>Mind</b>	Problem solving skills includes: Planning; problem solving; help-seeking; and critical and creative thinking.
<b>Body</b>	Physical health includes: Health; physical energy; and physical capacity.

**FIGURE 4:** The four main groups of factors that influence a person's ability to respond positively to adverse life events

<b>Individual health and wellbeing:</b>	Sense of self; social skills; sense of purpose; emotional stability; problem solving skills; and physical health.
<b>Predisposing or individual factors:</b>	Genes; gender and gender identity; personality; ethnicity/culture; socio-economic background; and social/geographic inclusion or isolation.
<b>Life history and experience:</b>	Family history and context; previous physical and mental health; exposure to trauma; past social and cultural experiences; and history of coping.
<b>Social and community support:</b>	Support and understanding from family, friends, local doctor, local community, school; level of connectedness; safe and secure support environments; and availability of sensitive professionals/carers and mental health practitioners.

(Adapted from Maslow, 1943; Beaurais, 1998; Kumpfer, 1999; Rudd, 2000)



## What we know about the impact of resilience and vulnerability

Everyone experiences stress and difficult circumstances during their life. Most people can handle these tough times and may even be able to make something good from a difficult situation.

Individual '*resilience*' is a person's capacity or competence to adapt and respond positively to stressful situations.<sup>45</sup> It is the ability to bounce back, recover from, or adjust to misfortune or change.<sup>46</sup> It is the ability to learn and grow through the positive and the negative experiences of life, turning potentially traumatic experiences into constructive ones. Being resilient involves engaging with friends and family for support, and using coping strategies and problem-solving skills effectively to work through difficulties.

On the other hand, people who have a tendency to become discouraged or defeated when faced with challenging life events may be considered to be more '*vulnerable*'. Vulnerability is the characteristic that predisposes a person to respond in a negative way to difficult or traumatic life events.<sup>47</sup> Many factors contribute to vulnerability, and often they are the same factors that contribute to resilience. For instance a family environment that is supportive and caring will enhance resilience, while lack of family support or exposure to abuse or trauma may make a person more vulnerable and less able to cope with potentially traumatic incidents.

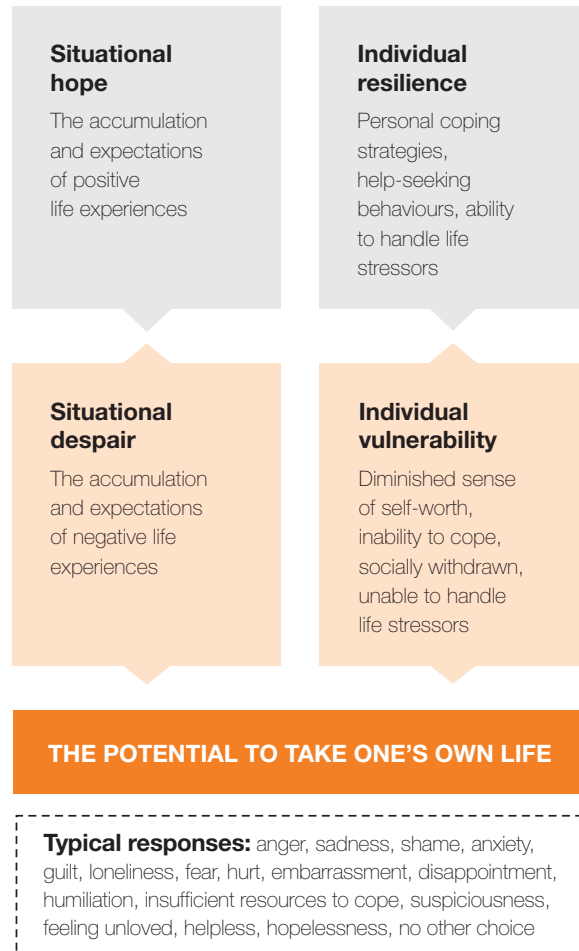
Resilience and vulnerability are often viewed as being at opposite ends of a continuum, reflecting a person's ability to respond either positively or negatively when exposed to risk or a potentially traumatic situation.<sup>48</sup>

As each individual develops, their expectations of life are shaped by their experiences and particularly by their family life and their social interactions with others. The response to life events is strongly influenced by accumulated experiences (cultural, social, and family) from the past, in the present, and in anticipating the future (expectations, hopes, dreams and fears). The accumulation of life experiences helps to create a particular view of what life has to offer, for example a hopeful or a despairing future.

During their life, people move between situational hope and despair, influenced largely by the events that happen and have happened around them. Where someone's life has involved many negative experiences, they may develop a view of the world ('world view') that leads them to expect the worst outcome from a traumatic or life-changing event.

The interaction between an individual's resilience and their expectations of life can act to increase the likelihood of thoughts and behaviours about taking one's own life (see **Figure 5**).

**FIGURE 5:** The potential to suicide: where individual vulnerability meets situational despair



## What we know about the impact of mental illness on suicide-related behaviours

Mental illness has been shown to have a strong relationship with suicide-related behaviours.<sup>49</sup> Mental illness describes a group of illnesses where people may show irrational behaviour, disturbed mood, poor judgement, abnormal perceptions or thoughts, disturbed emotions and ability to relate to others, and inability to cope with life events.<sup>50,51</sup> The severity of mental illnesses may range from being brief or episodic to being persistent and disabling. Mental illnesses including anxiety and mood disorders should be diagnosed by a qualified mental health professional. Estimates of the percentage of people whose suicide is related to mental illness vary considerably from study to study, ranging from 30% to 90% of all suicides.<sup>52</sup> However, only a small percentage of people diagnosed with these conditions ever attempt suicide and a diagnosis of mental illness cannot be relied on as a reliable predictor of suicide-related behaviours.

While mental illness is *linked* to suicide, this does not mean that everyone who takes their own life is mentally ill or is emotionally or intellectually disturbed when they make that decision. For some, suicide may be an impulsive and irrational act, but for others, it may be a carefully considered choice<sup>53</sup> particularly where the person believes that his or her death will benefit others. To imply that all those who suicide have a mental illness can itself be a barrier to seeking help since mental illness still carries with it significant stigma<sup>54</sup>, and classifying people who have suicidal thoughts or feelings as 'mentally ill' may isolate them and discourage them from seeking appropriate help, treatment and support.<sup>55</sup> More importantly, mental illness (as broadly defined) may simply be an outcome of other events that are occurring or have occurred in a person's life. There is a growing body of recent research which suggests that there is a strong link between mental illness, genetic factors and life events.<sup>56,57</sup> It suggests that the high incidence of mental ill-health (in particular, depression) can be the result of the accumulation of stressful life events involving threat, loss, humiliation or personal defeat.

Suicide attempts and life events are strongly linked. A negative life event can trigger suicide-related behaviours in some people. In one study, suicide attempters reported four times as many negative life events as the general population, and depressed patients reported high levels of negative life events before the onset of their depression. Although many people who suicide or self-harm do so in response to critical events, most also have predisposing social or mental health risk factors.

There is also a complex, circular relationship between mental illness, other risk factors and suicide-related behaviours; having a mental illness may itself give rise to events that exacerbate suicidal thoughts. For example, a person in a manic state may make reckless decisions that cause unbearable stress and result in suicidal thoughts.

Most mental illnesses are associated to some degree with suicide-related behaviours and/or suicide.

- The strongest links are with clinical depression, bipolar disorder, schizophrenia, alcohol or other drug abuse, borderline personality disorder, and behavioural (e.g. conduct, oppositional) disorders in children and adolescents.<sup>58</sup>
- Suicide is a more common cause of death among people with schizophrenia and mood disorders than it is in the general population, and the risk for suicide-related behaviours is more marked if the person has more than one mental illness.
- Psychiatric inpatients and people receiving treatment for a mental disorder have been shown to have a significantly higher risk of suicide compared to the general population. They are at particular risk of suicide immediately following discharge from psychiatric inpatient care or emergency departments, especially if the person has previously been suicidal or was an involuntary admission, and where they live alone or are exposed to work stresses. To assist these people post-discharge and reduce the risk, it is important to provide effective 'safety nets' within communities through treatment of the circumstances that led to the admission, management of work and other stresses, and improved follow-up and ongoing assessment of suicide risk.<sup>59,60</sup>
- People diagnosed with depression may in the early phases of recovery be at increased risk of acting upon their suicidal ideas due to a delayed response to treatment. It is therefore important to educate individuals, family and carers about this and how to minimise the risk until the patient's mood recovers and the suicidal ideas abate.

## Mental health interventions to reduce suicidal behaviours

Effective treatment of a mental disorder (e.g. depression, schizophrenia) through medication, counselling or other methods reduces suicide rates within these groups. One study estimated that if the three disorders most associated with suicide-related behaviours (i.e. depression, alcohol/drug/substance abuse disorders and schizophrenia) were treated in 50% of all people with these conditions, suicides would be reduced by approximately 20%.<sup>61</sup> Treatments include medication, counselling, therapy and social support, or a combination of these. If the illness is particularly severe or the person is unsafe, it includes admission to hospital.

Antidepressant medications, such as those that influence serotonin levels in the brain, have also been shown to reduce suicidal thoughts and behaviours in some studies.<sup>62</sup> However, there was debate in recent research about the use of antidepressants with some researchers proposing that for groups such as children and adolescents, antidepressants have limited effectiveness and may actually increase suicidal thinking. This has been disputed by recent Australian and New Zealand research which shows that the benefits of these drugs outweigh the risk.<sup>63-70</sup>

The effective treatment of mental illness is not the only preventative measure needed to reduce suicide-related behaviours.<sup>71</sup> There is also evidence that providing a sense of caring, better social connectedness and creating a secure, safe and empathetic environment for those who have a mental illness can reduce the risk of suicide. In providing this, it is important to provide the right treatment and assistance including having a trained team of health professionals who understand the person's condition and circumstances, and who will assist in providing the care and support in an integrated way. The approach is reflected in recent government initiatives that target the provision of multidisciplinary care to people who present to a General Practitioner with mental health issues.

## What we know about the impact of life events on suicide-related behaviours

Everyone at some time experiences adverse life events and difficult circumstances. Stress, sadness and anxiety are all normal human responses during such times. Most people can cope with changing and challenging circumstances and continue to function in their personal, professional and social lives. However the same life event can have a very different impact on different people, depending on the context and the person's capacities.

There is a growing body of evidence suggesting that one or more adverse life events often precede suicide attempts. A research review found that many case-control studies have shown that people who take their own lives are likely to have experienced more recent adverse life events than people who do not.<sup>72</sup> Additionally, as early as 1975, it was found that people who attempted suicide reported four times as many adverse life events as the general population. These findings indicate a strong and immediate relationship between suicide attempts and life events.<sup>73</sup>

However it is not possible to accurately assess the relative impact of immediate life events and other risk factors such as family experiences, personality traits and mental illness on a person's decision to take their life.<sup>74</sup> This is because people respond differently to different events and it is how the individual responds, rather than events themselves, that often determines the outcomes and consequences. For example, there is some evidence that traumatic life events (unemployment, relationship conflict, physical illness, economic hardship, loss or grief) may have a greater impact on people who have a severe mental illness, such as schizophrenia, than those who do not.<sup>75</sup>

Australian research on the relationship of life events to suicide-related behaviours is not conclusive (see Appendix A). What is clear is that suicide and suicide-related behaviours can be linked to combinations of life events and personal and social circumstances.

**Figure 6** on the following page, provides a summary of how factors may interact to impact on suicide and suicide-related behaviours.

FIGURE 6: Personal factors and life events that have been linked to suicide

Domains	Strong evidence of a link to suicide and suicide-related behaviours	Some evidence of a link to suicide and suicide-related behaviours
<b>Age</b>	25-44 age group	Developmental stages Older age
<b>Personal characteristics</b>	Genetic factors Gender (male) Vulnerability	Personality Gender identity (gay, bisexual)
<b>Culture</b>	Indigenous Loss of cultural identity	Second generation immigrants Asylum seekers
<b>Family life</b>	Ongoing family discord Child custody disputes Financial disputes	Family history of mental illness Family history of suicide Domestic violence Separation/divorce Children under care/protection Adoptee
<b>Health and wellbeing</b>	Mental illness	Physical illness or disability Sudden deterioration in quality of life
<b>Location/housing</b>	Rural or remote location Forced dislocation	Imprisonment Homelessness
<b>Financial wellbeing</b>	Financial difficulties	Low socio-economic status Bankruptcy
<b>Education</b>	Performance anxiety	Bullying at school Lack of connectedness to school Unexpected or perceived academic failure
<b>Risk behaviours</b>	Previous suicide attempts Self-harm Substance abuse	Gambling Reckless behaviour Criminal/legal issues
<b>Social networks</b>	Loss of social status/purpose Lack/loss of social support	Social isolation Peer group pressure Cyber bullying Rites of passage Suicide pacts
<b>Employment</b>	Professions/trades at risk Unemployment	Dismissal/retrenchment Violence/assault in workplace Work stress Workplace bullying Retirement
<b>Traumatic incidents</b>	Public humiliation Abuse	Discrimination/vilification Surviving major incidents Sudden death or accident of loved one Suicide bereavement
<b>Other</b>	Seasonal patterns	Economic recession Disasters/catastrophes Inappropriate media reporting

The research suggests that mental illness and life events interact with each other, although there is some debate about the extent and type of this interaction. **Figure 7** brings together the evidence from mental health research, individual resilience and the effects of life experiences, to identify the zone in which people are at highest risk of taking their own lives.

It makes clear that vulnerable individuals who have an accumulation of adverse life events (situational despair) and are experiencing mental illness are particularly vulnerable to taking their own life.

**FIGURE 7:** The link between individual vulnerability, situational despair, mental illness and potential to take one's own life



## What we know about suicide warning signs and tipping points

The warning signs and tipping points can be likened to potential 'signposts' that give early warning of the potential for suicide-related behaviours.

### Warning signs

A suicide warning sign is the earliest indication that someone might be at a heightened risk of immediate suicide. A warning sign indicates that a person is having serious thoughts about taking their own life and may even be making plans to take this action.

Suicide warning signs may be a cry for help, and they can provide a chance for family, friends, associates and professionals to intervene and potentially prevent the suicide from happening. The following behaviours may be considered as warning signs and are more common among people who are considering taking their own life:

- threatening to hurt or kill themselves;
- looking for ways to kill themselves, or talking about their suicide plan;
- talking or writing about death, dying or suicide (especially when this is out of character or unusual for the person);
- expressing feelings of hopelessness;
- expressions of rage, anger or revenge;
- engaging in reckless or risky behaviours;
- expressing feelings of being trapped, or that there's 'no way out';
- increased use of alcohol or other drugs;
- withdrawing from friends, family or the community;
- abnormal anxiety or agitation;
- abnormal sleep patterns – not sleeping or sleeping all the time;
- dramatic changes in mood, such as sudden feelings of happiness after a long period of sadness or depression;
- giving away possessions or saying goodbye to family and/or friends; and/or
- saying they have no reason for living or have no purpose in life.

It should be noted that most people show some of these signs at some time, especially when they are tired, stressed or upset without being suicidal.

### Tipping Points

Suicide-related behaviours result from complex interactions between a wide range of factors: some individual; some related to family or socio-economic or cultural background; some related to social, community and lifestyle issues; and others linked to mental illness. The most frequently cited model for understanding why people take their own lives is the 'threshold' or 'trigger' model.<sup>76</sup> It suggests that the potential for suicide-related behaviours exists at a certain 'threshold' level in many people. The threshold in each person is determined by factors such as genetic predisposition, biochemical factors in a person's physiology, personality traits, their emotional state (feelings of hopelessness), and the presence of ongoing support systems (social, economic, cultural).

The point at which a person's risk of taking their own life increases due to the occurrence of precipitating event(s), such as a negative life event or an increase in symptoms of a mental disorder may be called a '*tipping point*'. Tipping points vary for every individual, but there are some indicators of times at which people may be under particular stress. Sometimes referred also to as 'triggers' or 'precipitating events', they include mental disorders or physical illnesses, alcohol and/or other substance abuse, feelings of interpersonal loss or rejection, or the experience of potentially traumatic life events (unexpected changes in life circumstances). Tipping points can be thought of as the 'final straw' that may lead someone who has been considering suicide to take action.

Examples of events and circumstances that may act as a tipping point include:

- an argument with a loved one or significant person
- the breakdown of a relationship
- the suicide of a family member, friend or public role model
- a media report about suicide
- the onset or recurrence of a mental or physical illness
- unexpected changes in life circumstances
- experiencing a traumatic life event, such as abuse, bullying or violence.

For the purposes of suicide prevention, precipitating events and triggers to suicide can be categorised into four different types of precipitating events, based on the increasing likelihood of suicide-related behaviours, although they do not necessarily occur sequentially (see **Figure 8**).

FIGURE 8: Examples of typical triggers or precipitating events to suicide

Risk factors	Warning signs	Tipping point	Imminent link
<ul style="list-style-type: none"><li>• mental health problems</li><li>• gender – male</li><li>• family discord, violence or abuse</li><li>• family history of suicide</li><li>• alcohol or other substance abuse</li><li>• social or geographical isolation</li><li>• financial stress</li><li>• bereavement</li></ul>	<ul style="list-style-type: none"><li>• hopelessness</li><li>• feeling trapped – like there's no way out</li><li>• increasing alcohol or drug use</li><li>• withdrawing from friends, family or society</li><li>• no reason for living, no sense of purpose in life</li><li>• prior suicide attempt</li><li>• uncharacteristic or impaired judgement or behaviour</li></ul>	<ul style="list-style-type: none"><li>• relationship ending</li><li>• loss of status or respect</li><li>• debilitating physical illness or accident</li><li>• death or suicide of relative or friend</li><li>• suicide of someone famous or member of peer group</li><li>• argument at home</li><li>• being abused or bullied</li><li>• media report on suicide or suicide methods</li></ul>	<ul style="list-style-type: none"><li>• expressed intent to die</li><li>• has plan in mind</li><li>• has access to lethal means</li><li>• impulsive, aggressive or anti-social behaviour</li></ul>





# The Living Is For Everyone suicide prevention model

## Rationale for the model

The research and evidence related to:

- risk and protective behaviours;
- resilience and vulnerability;
- the impact of the interaction of personal factors and life events, including mental health; and
- warning signs and tipping points, requires a suicide prevention model that supports implementation of activities and services across the community that address the needs of the broader population, of specific groups identified as being at risk and of people who may be at high risk of suicide (defined as in *universal*, *selective* and *indicated* interventions).

## The three-pronged approach

Traditionally, approaches to care in the health sector were based on the concepts of primary, secondary and tertiary prevention. Primary prevention aims to prevent the onset of a particular disorder; secondary prevention aims to identify and treat persons who have no symptoms but have developed risk factors or preclinical disease; and tertiary prevention aims to minimise the effects of an established disorder, prevent complications and minimise the amount of disability.<sup>77</sup>

In the 1980s, with increasing awareness of the complexity of the factors (risk, protective, contextual, personal) that influence any illness, the traditional model was replaced by the *universal*, *selective* and *indicated* prevention model, introduced by R.S. Gordon Jr.<sup>78</sup> It focussed on different groups of clients rather than on the treatment mechanisms. *Universal* measures can be applied to everybody, a whole population or a whole community; *selective* preventative measures can be applied to a sub-group at known increased risk; and *indicated* measures target individuals who are at high risk. This approach is now the basis of suicide prevention in the United States.<sup>78</sup>

In 1994, Mrazek and Haggerty<sup>79</sup> adapted Gordon's model to include the whole 'spectrum' of interventions (prevention, treatment, maintenance, recovery). This Mrazek and Haggerty spectrum was further adapted (**Figure 9**) to provide the basis for the Australian National Mental Health Strategy<sup>80</sup> and the 2000 version of the Australian National Suicide Prevention Strategy.<sup>81</sup>

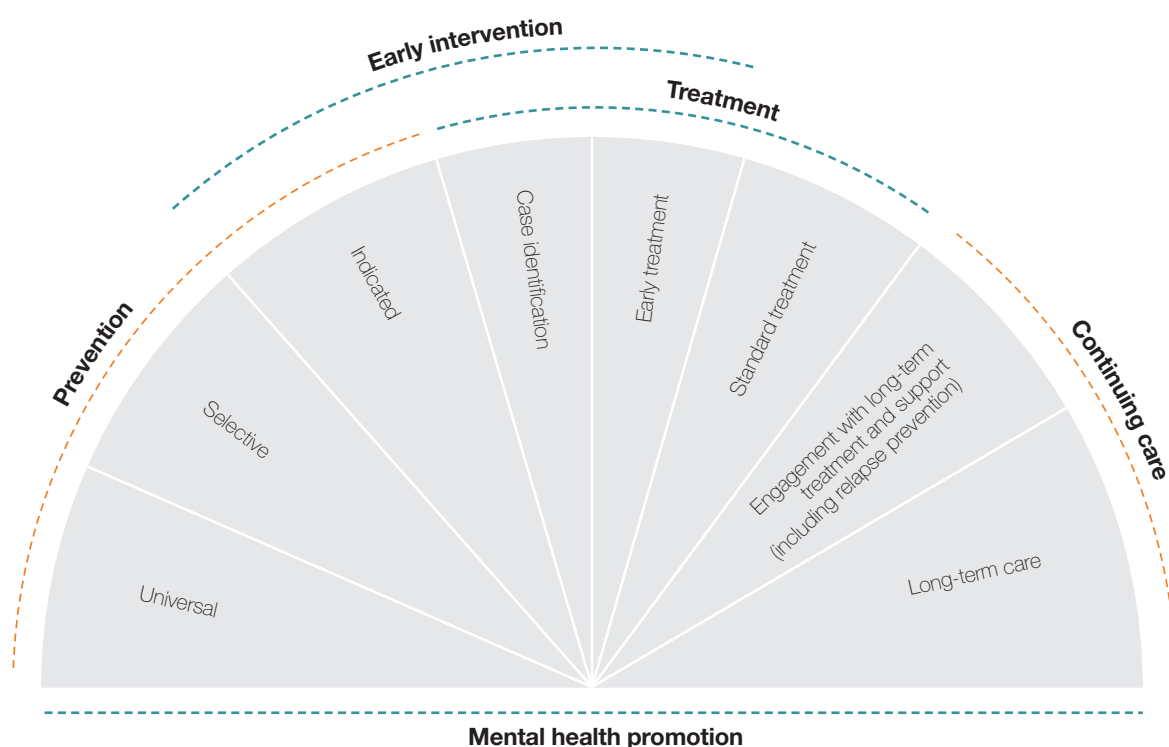
This spectrum (**Figure 9**) is primarily a clinical model that makes assumptions about progress towards long-term care and the need for treatment. It also uses terms that are not appropriate for people experiencing normal human reactions (anxiety, sadness, anger, frustration, episodic depression) in response to adverse life events. Terms such as '*treatment*', '*care*' and '*recovery*' can be seen to imply that these human emotions are an illness rather than normal human reactions to stressful circumstances.



As a result, recent research and consultations have indicated the need for a new model that is more directly applicable to suicide prevention and to reflect more accurately the range of human responses to stressful events. Modifications required include:

- moving from a mental health focus to a focus on individual health and wellbeing; from clinically-oriented interventions towards a person-centred approach that is specific to suicide prevention;
- moving the focus from defining the pathways to suicide, with information on predisposing or influential factors<sup>82-85</sup> to defining the alternative pathways to improved health and wellbeing;
- removing medical and technical language and using plain language;
- responding to the need for community-based 'safety net' functions between interventions, based on evidence from systems theory, from safe handover and patient safety initiatives in the medical profession, and from suicide research;
- promoting the importance of evaluation of all suicide prevention activities in order to build the evidence base of what works and does not work in suicide prevention;
- respecting and building on the collective knowledge and experience of routine human responses to adverse life events; and
- including lessons learnt from the suicide prevention literature.

FIGURE 9: Spectrum of mental health interventions



## The inclusion of 'safety nets'

The Mrazek and Haggerty spectrum of mental health interventions is a complex network of loosely connected interventions involving many players (the community, family, friends, clinicians) and several different types of interventions (*universal, selected, indicated*). It is well documented that failures in complex systems tend to occur primarily at the points of handover of responsibilities – in this case, between the component parts of the spectrum.<sup>86-92</sup> In complex health systems, failures at these handover points are increasingly being recognised, and the importance of providing safe clinical handover and patient safety is increasingly emphasised in the health sector.<sup>93-96</sup>

In 2004, the Australian Council for Safety and the Quality of Health Care (p.18) declared that:

*'Health care itself is complex with many steps involved in most types of care. The statistical probability of error increases as the number of steps in a process grows... most health care services are now organised around networks or areas of service provision.'*<sup>97</sup>

Clinical handover refers to:

*'the transfer of information from one health care provider to another when:*

- *a patient has a change of location of care, and/or*
- *the care of a patient shifts from one provider to another.'*<sup>98</sup>

There is a move in Australia and overseas to pay more attention to the transitions between health services, with greater emphasis on responsibility and duty of care for the patient. The British National Safety Agency is pursuing a policy of ensuring 'continuity of care', which it defines as *'the transfer of professional responsibility and accountability for some or all aspects for a patient or group of patients, to another person or professional group on a temporary or permanent basis'*.<sup>99</sup>

The suicide literature also provides strong evidence that major system failures occur in the transition zones between clinical responsibilities.<sup>100</sup> Current evidence suggests that:

- patients are 200 more times more likely to suicide after clinical treatment;<sup>101</sup>
- the risk of suicide is greater after leaving psychiatric inpatient care than before a person begins this type of treatment. The risk is elevated in the first day<sup>102</sup>, week<sup>103 104</sup>, month<sup>105</sup>, and year<sup>106</sup> after leaving treatment;

- for men, the rate of suicide in the first 28 days after discharge has been found to be 213 times greater than would be expected in the general population;<sup>107</sup>
- at 12 months post discharge, suicide rates were 27 times higher among men and 40 times higher in women, compared to the general male and female population respectively.<sup>108 109</sup>

This evidence suggests the need to modify the Mrazek and Haggerty spectrum of mental health interventions, to respond to the need for support and care in the gaps in between the model's segments. 'Community-based safety nets' are needed to bridge these gaps which focus on providing the support needed by people who are feeling suicidal and are in transition between stages of professional care and support.

This is also mirrored, in part, in the recent proposal from the Mental Health Council of Australia (MHCA) for *'a massive investment in a range of community-based recovery support services (after discharge from clinical care).'*<sup>110</sup> The MHCA report sees the essential role that needs to be played by a 'full range of community services' that fill the gaps between conventional clinical treatments.

## The LIFE (2007) model

The LIFE (2007) model is therefore based on the premise that:

- the responsibility for suicide prevention rests with individuals, health professional groups and services across the community, and that interventions<sup>1</sup> should be provided in a coordinated and integrated way according to the needs of the individual and community; and
- 'safety nets' should be provided to support people moving between treatment options, and back into the community through:
  - community-based services to support and foster recovery after discharge from clinical care;
  - effective client hand-over practices between services and back into the community; and
  - cooperation and communication between health professionals, community support services, families, workplaces, and community groups.

<sup>1</sup>Intervention - To take action or provide a service so as to produce an outcome or modify a situation. Any action taken to improve health or change the course of, or treat a disease or dysfunctional behaviour.

## Key features of the LIFE (2007) model

In light of the research and consultations undertaken as part of the review of the *LIFE Framework (2007)*, the Mrazek and Haggerty model was further adapted for *LIFE (2007)* with the following specific features:

- the individual's health, wellbeing and responses to life events are at the centre of the model, recognising that people respond and cope differently, and vary in their vulnerability and resilience. They respond differently to adverse events and do not always follow a logical or linear path; from risk, to warning sign, to tipping points and to the need for specialised care. Individuals can move from apparent good health directly into adverse reactions and a need for immediate specialised care with no apparent warning;
- the new model uses more everyday language, to make it accessible to a wider audience; and
- it includes community-based 'safety nets' to support people as they move from one treatment setting to another, or are discharged back into the community. This reflects the strong evidence – both from health systems generally, and in relation to suicide in particular – that people are most exposed to risk at these handover points between interventions. This is when things are most likely to go wrong and when support is most critical.

## Eight domains of activity

To reduce the loss of life through suicide, activities will occur across eight overlapping domains of care and support (see **Figure 10** *LIFE (2007) continuum of suicide prevention activities*). The eight domains of the suicide prevention model are:

1. *Universal interventions* aim to engage the whole of a population or populations to reduce access to means of suicide, reduce inappropriate media coverage of suicide, and to create stronger and more supportive families, schools and communities.
2. *Selective interventions* entail working with groups and communities who are identified as 'at risk' to build resilience, strength, capacity and an environment that promotes self-help and support. This might include, for instance, working with families of those who have taken their own life to respond to their grief and loss, and to their elevated risk of suicide; or working with children who are survivors of abuse to build strength and resilience.
3. *Indicated interventions* target people who are showing early signs of suicide risk, or who may be in a situation, or have early signs of an illness, known to heighten the risk. A part of this might be to help the person manage the situation, the problems or the symptoms. Another part might be to provide education for other professionals providing or sharing the care, for the specific family, or for community professionals – to increase local capacity to be alert and responsive to early signs of risk in the individual and to take immediate action if necessary to provide support for the person.
4. *Symptom identification* which entails knowing, and being alert to, signs of high or imminent risk, adverse circumstances and potential tipping points; and providing support and care when vulnerability and exposure to risk are high.
5. *Finding and accessing early care and support* when treatment and specialised care is needed. This is the first point of professional contact that provides targeted and integrated support and care, and monitors interventions to ensure the client's access to further information and care as needed.
6. *Standard treatment* when specialised care is needed: integrated, professional care to manage suicidal behaviours, comprehensively treat and manage any underlying conditions, and to improve wellbeing and assist recovery.
7. *Longer-term treatment and support* to assist in preparing for a positive future, entailing continuing integrated care to consolidate recovery and reduce the risk of adverse health effects. In particular, this may be a time to directly focus on distal or background risks for suicide to remove them or to reduce their impact in the future. Alongside this, efforts can be made to improve protective factors for the individual, their immediate family and their local community.
8. *Ongoing care and support* involving health professionals, workplaces, community organisations, friends and family to support people to adapt, cope, and to build strength and resilience within an environment of self-help. This may be the opportunity to increase broader community education about the issues and awareness of the strategies that may be needed to prevent recurrences.

## Six overlapping areas of care and support

The *LIFE (2007)* suicide prevention model identifies six overlapping areas of care and support required for people who may be feeling suicidal (*pathways to care*). They are:

- assisting people to help themselves and creating an environment that supports self-help (*promoting self-help*);
- recognising early warning signs and providing early intervention to assist people to resolve issues and/or access appropriate help (*responding to help-seeking behaviours*);
- increasing understanding of suicide and suicide prevention and of the capacity for individuals and local communities to recognise and respond to early warning signs and to take appropriate steps to make people safe (*promoting local understanding and support*);
- building the capacity for meeting the needs of individuals who might be feeling suicidal (*targeted support and care*);
- providing access to specialist care and integrated local support for those who are feeling chronically suicidal or are exposed to greater risk of suicide (*specialised care*); and
- maintaining an environment where individuals, families and communities can build resilience and improve their general health and wellbeing during times of adversity (*individual, family and community growth and development*).

The effective implementation of the model assumes the development and maintenance of close local working partnership between community-based 'recovery support' (family, friends and associates as well as community-based service providers and health centres) and health sector professionals (local doctors, emergency staff, health professionals, primary health care practitioners and hospital personnel).

## LIFE (2007) continuum of suicide prevention activities

Figure 10 provides a summary of the range of types of suicide prevention activities and interventions that are essential for a whole of community response to reducing the rate of suicide, the risk of suicide, suicide attempts, and of suicidal behaviours in individuals. For each activity/ intervention the following is defined: the target group; the proposed outcomes; and who might be involved in the activity/ intervention.



FIGURE 10: LIFE Framework continuum of suicide prevention activities

	Target groups	Outcomes	Who is involved?
<b>Universal intervention</b>	Activities that apply to everyone (whole populations)	Reducing access to means of suicide, altering media coverage of suicide, providing community education about suicide prevention and creating stronger and more supportive families, schools and communities.	Involving: individuals, families, consumer and carer organisations, multicultural organisations, local councils, sporting and recreational clubs, workplaces, media, educational organisations, providers of education and information on mental health and suicide prevention, service clubs and pubs.
<b>Selective intervention</b>	For communities and groups potentially at risk	Building resilience, strength and capacity and an environment that promotes self-help and help-seeking and provides support.	Involving: individuals, families, consumer and carer organisations, multicultural organisations, local councils, sporting and recreational clubs, workplaces, media, educational organisations, Divisions of GP, service clubs and pubs.
<b>Indicated intervention</b>	For individuals at high risk	Building strength, resilience, local understanding, capacity and support; being alert to early signs of risk; and taking action to reduce problems and symptoms.	Involving: individuals, families, consumer and carer organisations, multicultural organisations, GPs, police, gerontologists, rehab providers, emergency workers, specialist physicians, sporting and recreational clubs, workplaces, educational organisations, service clubs and pubs.
<b>Symptom identification</b>	When vulnerability and exposure to risk are high	Being alert to signs of high risk, adverse health effects, and potential tipping points; and providing support and care.	Involving: GPs, help lines, police, gerontologists, rehab providers, emergency workers, specialist physicians, teachers, pharmacists, workplaces family and friends and other gatekeepers.
<b>Early treatment</b>	Finding and accessing early care and support	Providing first point of professional contact; targeted and integrated support and care; and monitoring and ensuring access to further information and care.	Involving: GPs, psychologists, allied mental health professionals, Aboriginal Health Workers, emergency departments, police, gerontologists, emergency workers, specialist physicians, community health services, help lines, crisis teams, school counsellors.
<b>Standard treatment</b>	When specialised care is needed	Providing integrated professional care to manage suicidal behaviours and improve wellbeing as a step in recovery.	Involving: psychiatrists, psychologists, GPs, allied mental health professionals, Aboriginal Health Workers.
<b>Longer-term treatment and support</b>	Preparing for a positive future	Providing ongoing integrated care to consolidate recovery and reduce the risk of adverse health effects.	Involving: psychiatrists, psychologists, GPs, allied mental health professionals, families, workplaces, local community organisations and clubs, rehabilitation services, Aboriginal Health Workers, help lines.
<b>Ongoing care and support</b>	Getting back into life	Building strength, resilience, and adaptation and coping skills, and an environment that supports self-help and help-seeking.	Involving: GPs, allied mental health professionals, Aboriginal Health Workers, community service providers, families, local community organisations, workplaces and clubs.

'Safety Nets' for people moving between treatment options, and back into the community. This includes:

- community-based services to support and foster recovery after discharge from clinical care;
- effective client hand-over practices between services and back into the community; and
- effective cooperation and communication between health professionals, community support services, schools, families, workplaces and community groups.

# Suicide in Australia



The Australian Bureau of Statistics is responsible for gathering data from each of the state jurisdictions and compiling the annual publication *Causes of Death*. The number of suicides in any given year is always underestimated to some extent.<sup>111</sup> There are some issues around quality of data due to inconsistent coronial practices, however there are ongoing efforts to make the statistics as accurate as possible.

## Suicide trends and comparisons

Suicide in Australia accounts for 2.5% of all male deaths and 0.7% of all female deaths (2005 figures). **Figure 11** provides a comparison of rates of suicide as a cause of death for males and females, with other high incidence causes. As is common in most countries internationally, the suicide rate for men in Australia is significantly higher than that for women.

Suicide rates are usually expressed in terms of deaths per 100,000 people. **Figure 12** shows the 2005 suicide rates (per 100,000) for all Australian States and Territories over a five year period to 2005.

*NOTE: In jurisdictions with smaller populations, one or two suicides can have a significant impact on the total rate.<sup>112</sup>*

FIGURE 11: Selected causes of death in Australia by gender

Causes	Deaths		% of all deaths	
	Males	Females	Males	Females
Heart disease	15,682	15,515	23.3	24.4
Cancer of the airways	4,694	2,705	7.0	4.3
Breast cancer	17	2,719	<0.1	4.3
Suicide	1,657	444	2.5	0.7
Diabetes	1,775	1,754	2.6	2.8
Car, bike accidents	1,224	414	1.8	0.7
Influenza, pneumonia	1,331	1,703	2.0	2.7
Murder, assault	130	69	0.2	0.1
<b>Total</b>	<b>67,241</b>	<b>63,473</b>		

(Source: Australian Bureau of Statistics)<sup>111</sup>

FIGURE 12: Age standardised suicide rates by Australian State and Territory, 2000-2005

State	Deaths		Rates (per 100,000)
	Males	Females	
New South Wales	438	111	8.0
Victoria	393	112	9.9
Queensland	360	99	11.6
South Australia	182	49	14.8
Western Australia	169	34	10.0
Tasmania	52	22	15.6
Northern Territory	37	8	22.5
Australian Capital Territory	26	9	10.6
<b>Total</b>	<b>1,657</b>	<b>444</b>	<b>10.3</b>

(Source: Australian Bureau of Statistics)<sup>111</sup>

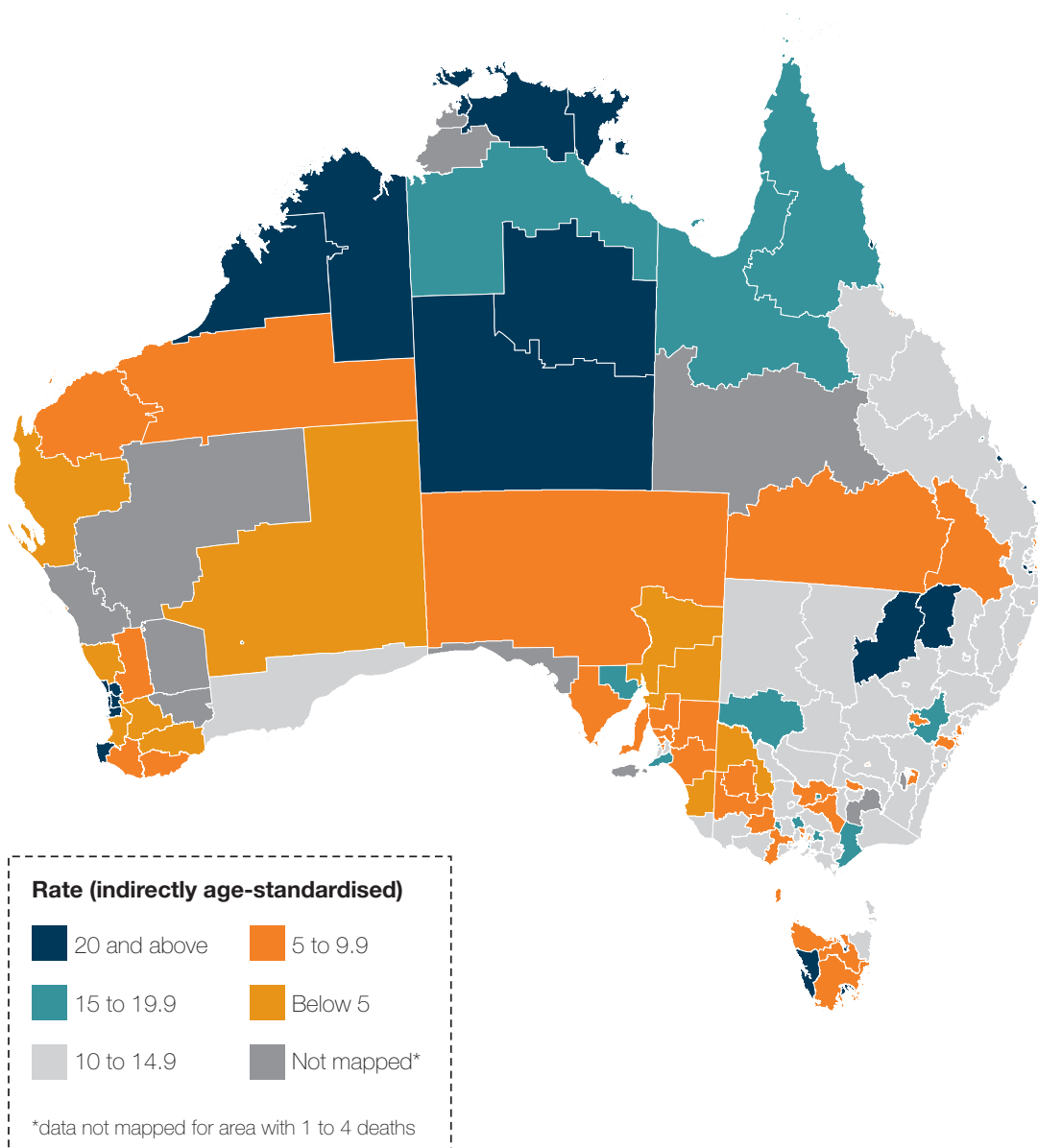


Figure 13 shows the geographic distribution of deaths through suicide and self-inflicted injuries by absolute number and by rate (per 100,000) for statistical subdivisions.

When viewed together, a picture emerges of the main geographic locations that have high suicide numbers and high suicide rates (see Appendix B).

**FIGURE 13:** Distribution (by rate per 100,000) of deaths through suicide and self-inflicted injuries across Australia (2001-2004)

**Age-standardised mortality rate per 100,000 population by ABS Statistical Subdivision**



NOTE: Average annual rate of suicides over the four years 2001 to 2004

Source: Published in the Public Health Information Department Unit from death registrations supplied by the Australian Bureau of Statistics

(Source: PHIDU, University of Adelaide, 2006)



## Placing Australian rates in an international context

The suicide rate in Australia is higher than some countries and lower than others. Making comparisons between countries is difficult due to the different ways of collecting data about deaths. **Figure 14** shows the suicide rates for a selection of countries whose system for providing data to the World Health Organisation (WHO)<sup>ii</sup> is similar to Australia's. It is problematic to make meaningful comparisons between the reported suicide rate of one country and another without fully understanding differences.

### Rate per 100,000

**FIGURE 14:** Age-standardised suicide rates in some other countries (2002)

Country	Rate per 100,000
Greece	2.8
Italy	5.0
Brazil	5.4
Spain	6.3
Netherlands	7.4
United Kingdom	7.8
Malaysia	8.0
USA	9.5
Singapore	9.8
Argentina	10.2
<b>Australia</b>	<b>10.4</b>
Sweden	10.4
Canada	10.6
Germany	10.6
Norway	10.7

Country	Rate per 100,000
Denmark	10.9
Ireland	11.1
Chile	11.5
New Zealand	12.2
France	13.2
Cuba	13.5
Switzerland	13.5
Austria	14.3
Poland	15.2
Korean Republic	17.2
Belgium	17.6
Japan	18.7
Finland	20.6
Hungary	22.7
Russian Federation	36.0

(Source: WHO, <http://www.who.int/healthinfo/statistics/bodgbdeathdalyestimates.xls>)

<sup>ii</sup> The WHO publishes data on the causes of death in different countries.

## Indigenous Australians and suicide

Suicide among Australia's Indigenous population is significantly higher than the general Australian population, with estimates suggesting that, in some years, the suicide rate for Indigenous people in specific communities is as much as 40% higher than that for the Australian population as a whole. Over the past 30 years Indigenous suicide has increased dramatically, with young Indigenous males (aged 17-23) being the most at risk.<sup>113 114 115 116</sup>

The high suicide rate among some groups of Indigenous Australians (particularly in young males) is often attributed to a number of factors that combine to magnify the risk for suicidal behaviours and self-harm. These include:

- Indigenous people are often exposed to a number of known environmental risk factors for suicide, including poverty, low socio-economic status, lack of education, poor employment prospects, reduced access to services, living in rural or remote communities, domestic violence or abuse, and alcohol and other drug abuse;<sup>117</sup>
- many Indigenous people have been affected by the suicide of another family or community member that may increase the likelihood of 'copy-cat' suicides;
- trauma and grief are ever present within many Indigenous communities as a result of the continuing loss and traumatisation from past dislocation and mistreatment, as well as current grief from the deaths of family and community members and friends;
- the number of Indigenous inmates in Australia's prison system is disproportionate to the total population;
- loss of cultural identity and social isolation is known to cause a person to lose their sense of purpose and meaning in life. Suicide among Indigenous people is likely to be a response to the broader social context of disintegration of their culture and communities;<sup>118</sup>
- lack of access to culturally appropriate services to assist people who may be at risk of suicide or who have been affected by suicide;<sup>119</sup> and
- relatively poor health amongst Indigenous Australians compared with the wider Australian community also poses a risk factor for suicide, particularly for older people.

As is the case amongst non-Indigenous Australians, Indigenous people who choose to take their own life are more likely to be experiencing a range of risk factors and the rate of suicide-related behaviours differs between Indigenous communities throughout Australia.<sup>120</sup>

Effective suicide prevention strategies in Indigenous communities need to:

- reflect how Indigenous people view health, mental health and suicidal behaviours. Indigenous people have a holistic understanding of health and wellbeing that not only affects the individual, but the community as a whole. Well being includes all aspects of health, including mental, physical, social, cultural and spiritual health;
- reflect a focus on wellbeing and mental health promotion, rather than focusing on mental illness and suicide;
- encourage ownership and involvement from local communities; and
- show respect for cultural beliefs and attitudes surrounding suicide and mental health, and employ culturally appropriate techniques and methods.<sup>121</sup>

### Implications for suicide prevention activities and interventions

Effective suicide prevention strategies in Indigenous communities are likely to involve:

- drawing on the expertise of Indigenous people and culturally competent staff in developing services that are culturally appropriate. This includes involving Indigenous people in the consultation, negotiation and decision making process, to establish community ownership of suicide prevention activities and other initiatives;
- recognising and harnessing the broad range of skills and expertise of Indigenous people to improve health and wellbeing and reduce suicidal behaviours;
- understanding that trauma and loss, both past and present, are significant factors contributing to reduced physical and mental health among Indigenous Australians and that the effects on families and communities are passed from one generation to the next;
- providing coordinated services to combat the range of social issues affecting Australia's Indigenous population; and
- providing regular screening and culturally appropriate treatment for mental illnesses, such as depression, using a combination of traditional and modern treatment methods.

Effective suicide prevention strategies in Indigenous communities are likely to involve expertise of Indigenous people and culturally competent staff in developing services that are culturally appropriate

## Men and suicide

Suicide is four times more common in men than women, and in 2005, 1,657 men took their own lives. This means that five men take their own lives in Australia every day. Many men make the decision to take their own life very quickly, showing few warning signs so it is essential to respond quickly and effectively to any warning signs. Statistics tell us that the men who are the most at risk are:

- young or in their middle years (20 to 44 years old Suicide accounts for around a quarter of all deaths among men in their middle years;<sup>iii</sup>
- older men (over 75);
- men living in rural or remote areas;
- men undergoing traumatic life events. Potentially traumatic life events that may increase men's likelihood of suicide include relationship breakdown, separation from children, unemployment, financial stress and social isolation. For some, these events can lead to feelings of shame and guilt, which can further increase risk;
- men in prison or custody; and
- men from Indigenous communities.

But men of all ages and backgrounds can be at risk.

Suicide accounts for more than one quarter of all deaths among men between the ages of 20 and 44 years in Australia.<sup>122</sup> Life events such as depression, unemployment, financial difficulties, relationship problems, work stress, and alcohol and drug abuse play a significant role in determining the risk of suicide in this age group.<sup>123</sup>

Various reasons for the relatively high rate of suicide in men in Australia have been suggested. They include:

- higher likelihood in men to choose methods of suicide that result in instant death;
- tendency not to recognise or respond to their own negative emotions or distress, which may result in more chronic and severe emotional responses to adverse life events;<sup>124</sup>
- not seeking help for emotional difficulties or communicating their feelings of despair or hopelessness to others;<sup>125</sup>

- a feeling that help-seeking displays weakness or failure and prefer to solve problems on their own, without being a burden on others;<sup>126</sup> and/or
- lack of awareness of available support services in their area or a feeling that these services do not adequately cater for their needs and would not help in their situation.

### Implications for suicide prevention activities and interventions

Recent studies propose that effective suicide prevention programs for men should promote physical and mental health, drawing on men's skills and strengths, rather than on perceived 'failings' or shortcomings.<sup>127</sup> Men respond well to services that encourage problem-solving and enhance their ability to gain control over their emotions and circumstances.<sup>128</sup> It is also valuable to introduce suicide prevention programs that target the family and friends of suicidal men who do not seek help themselves.<sup>129</sup> It is important that professional carers, such as general practitioners, actively ask men about their mental and emotional state, as men rarely initiate conversations about these topics.<sup>130 131</sup>

<sup>iii</sup> Source ABS 2007. Suicides. 2005 -Catalogue No. 3309.0

## Suicide in rural and remote locations

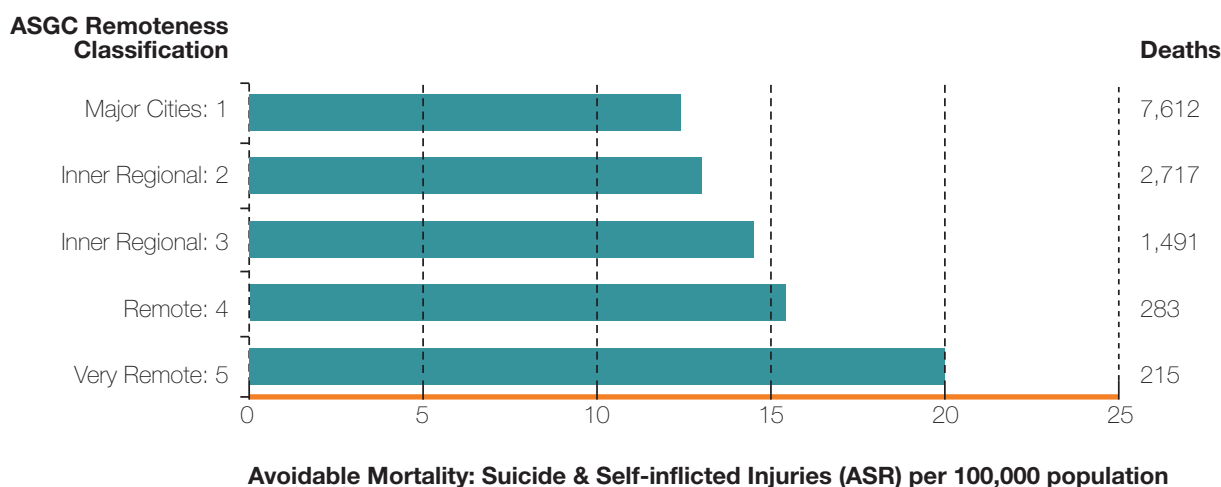
Suicide rates in rural and remote communities have risen substantially over the past few decades, especially among men. Actual rates, while high, can vary more widely from year to year, compared to regional and metropolitan areas because with the small population numbers in rural and remote areas, one or two suicides can have a significant impact on the rate.

**Figure 15** shows the different rates of suicide for the five categories of remoteness of areas (i.e. major cities, inner regional, outer regional, remote and very remote)<sup>132</sup> with the highest rates recorded in very remote areas (rate: 20.1 per 100,000 population).<sup>133</sup>

There are many possible reasons for these regional differences in suicide rates.<sup>134 135</sup> They include:

- Economic and financial hardship. Changes in the economy and extreme climate events (e.g. floods, drought) in regional Australia have a direct and substantial effect on many people in rural and remote communities. Bankruptcy, unemployment and financial difficulties can lead to depression and hopelessness, and are all known risk factors for suicide. They may also lead to other problems, such as relationship conflict or breakdown, gambling or substance abuse.
- Easier access to means that lead to immediate death. Firearms and other aggressive means of suicide may be more available in rural and remote areas. There are also likely to be more secluded or isolated locations where people can find themselves feeling alone and possibly unsafe.
- Social isolation. Many people in rural and remote Australia are socially isolated, with less face-to-face contact with family, friends and other support networks. This can lead to loneliness and depression and can contribute to suicidal behaviour.
- Less help-seeking. Many rural people are resilient and resourceful, and have a strong sense of self-sufficiency in regional and rural areas. This can discourage them from seeking help in difficult times from family, friends or their community.
- Reduced access to support services. Often rural and remote communities do not have access to a range of community support services, such as mental health services. Services that cater for people in metropolitan areas may not be appropriate for people living in rural and remote areas. Many people living in rural Australia do not have access to the internet and some do not have telephones. This makes accessing traditional methods of support and care difficult or, in some cases, impossible.
- Combinations of suicide risk factors. For many people in rural and remote Australia, risk factors may combine to increase the risk of suicidal behaviour.
- Within the many Indigenous communities in rural and remote Australia a wide range of social, psychological and environmental factors exist that put people in these communities at risk of suicide including social and economic marginalisation.

**FIGURE 15:** Suicide rates for different regions based on remoteness 1997–2001



(Source: Australian and New Zealand Atlas of Avoidable Mortality, Public Health Information Development Unit, University of Adelaide, 2006)<sup>132</sup>

## Implications for suicide prevention activities and interventions

Suicide prevention efforts should focus on increasing the availability of support services in these regions and enhancing social connectedness and participation in the community as well as providing gatekeeper training to ensure support and care for men at risk.

## Self-harm and suicide

'Self-harm'<sup>iv</sup> refers to the attempt to inflict physical harm to one's self and is often done in secret and without anyone else knowing. The terms 'deliberate self-injury' or 'non-suicidal self-injury' are also often used to describe injuries a person inflicts on himself or herself without necessarily the intent to suicide. Cutting, burning and ingesting toxic substances are the most common methods of deliberate self-harm but other methods include taking overdoses of medications, punching oneself, throwing one's body against something, pulling out hairs, scratching, picking or tearing at one's skin causing sores or scarring, and inhaling or sniffing harmful substances.

Self-harm causes distress for patients, families, friends, and carers. It also places considerable burden on the Australian economy, as people who self-injure often frequently access public emergency and psychiatric health services.<sup>137</sup>

Self-harm varies with the individual. Some people deliberately self-harm regularly, while others may do it only once or twice and then stop. They may injure themselves in response to a specific problem and stop once the problem is resolved. Others may self-harm over a much longer period, whenever they feel pressured or distressed, and use it as a way of coping, particularly where they have not learned or cannot use more positive ways of coping.

Groups who are prone to self-harm include:

- young people aged 11-25 years. In adult psychiatric populations the prevalence of non-suicidal self-injury has been found to be as high as 60%, while the most recent estimate of self-injury in Australian adolescents is 6.2%;<sup>138</sup>
- people who are developmentally or intellectually disabled usually cannot express their emotions verbally. In this group, self-harm is not usually accompanied by suicide-related behaviours or ideation;

- people with borderline personality disorder, but also occurs in a variety of other psychiatric disorders; and
- people with a psychosis may deliberately inflict serious injury on themselves, and this may result in death, though the person did not intend to suicide. The most common form of deliberate self-injury, however, is compulsive, impulsive, and repeated. It is more likely to occur when the person is distressed or in difficulty. The person may or may not have suicidal thoughts or behaviour.

People who deliberately harm themselves typically report feeling hopeless, anxious and rejected, having low self-esteem and finding it difficult to cope with the events in their lives. They often find it difficult to explain their feelings to others. They say that they do it to release tension or pressure, to reduce emotional pain, to punish themselves due to feelings of guilt and shame, to avoid letting others know how they are feeling, or to give themselves a sense of control over their lives. Deliberate self-harm may also be a symptom of an underlying mental illness requiring treatment by a health professional.

There is a complex link between self-harm and suicide;<sup>139 147</sup>

- despite having no apparent intention to die, up to 41% of people who self-harm report suicidal thoughts at the time of self-injuring and between 55% to 85% of people who self-harm have a history of at least one suicide attempt;<sup>140</sup>
- non-suicidal self-injury is a strong risk factor for suicide.<sup>141</sup> Those people who engage in repetitive self-harm (more than two episodes) are more likely to suicide than those with only one episode,<sup>142</sup> and between a quarter and a half of people who die by suicide have previously carried out a non-fatal act of self-injury;<sup>143</sup> and
- people who engage in self-harm and those who attempt suicide both score significantly higher on measures of depression and suicidal thoughts than the general population. However, the latter group have a more negative attitude towards life and report more traumatic experiences.<sup>144</sup>

<sup>iv</sup> A recent publication by the American Association of Suicidology proposes use of the generic term 'self-harm' to cover a range of behaviours.<sup>136</sup>

## Suicide and people from culturally and linguistically diverse backgrounds

### Implications for suicide prevention activities and interventions

Deliberate self-harm should always be taken seriously:

- one of the major predictors of suicide is a previous episode of deliberate self-harm, including previous suicide attempts;
- some research suggests people who self-harm are at increased risk of suicide, but other evidence indicates that they do not have any intention of dying and that harming themselves is their way of coping with life. However even if there is no suicidal intent accompanying the deliberate self-harm, the risk of accidental death is very real;
- people who repeatedly injure themselves may come to feel that they cannot stop, and this may lead to feelings of hopelessness and possibly suicidal thoughts;
- people who self-injure and those who attempt suicide have similar feelings of hopelessness, often believing that things will never improve or that they have lost all control over life. Additionally if the self-injury fails to relieve tension or control negative thoughts and feelings, the person may injure themselves more severely, or may start to believe they can no longer control their pain and may consider suicide; and
- adequate care and support for people who self-injure or attempt to take their own lives is essential to prevent repeated, and possibly fatal, behaviour.<sup>145</sup> Increasing community recognition and response to warning signs of suicide may also be effective in reducing suicide in people who self-injure or attempt suicide.<sup>146</sup>

While suicide occurs in most cultures, the phenomenon of suicide and suicidal thinking among people who move from one culture to another varies from country to country, and suicide rates among immigrants to Western countries appear, overall, to be higher than that found in the country of birth. This is so in Australia, but the relative contributions of pre and post immigration factors to suicide rates and mental illness are unclear.<sup>148</sup>

There is great diversity in the rate of suicide for immigrants to Australia, which in some cases is accounted for by the fact that in the early stages of settlement, the rate for particular groups generally mirrors the suicide rate of the country of origin; and the rate of suicide may also reflect the different reasons that people migrate and the impacts of migration on them.

For some, immigration is a very positive experience, including family reunion and better educational and employment opportunities. However, for others, immigration can be traumatic or fail to meet their expectations. It is important to particularly consider suicide prevention in relation to people from culturally and linguistically diverse (CALD) backgrounds for a number of reasons:

- the process of adapting to a new culture can in itself be a stressful experience particularly where there are wide differences in cultural beliefs, language, values and customs;
- for some who are elderly, become socially isolated, suffer health problems or are unemployed, separation from their culture and land of birth may be a traumatic experience that places them at risk of suicide;
- a significant number of people from CALD backgrounds do not seek help for their mental health problem, or are reluctant to do so. Often, they miss out on suicide support services because information is not available in community languages, or there is no culturally appropriate service available. They may also find it difficult to use mainstream services because of language and cultural barriers, may be confused about how services operate, or simply unaware of the range of services and supports that are available; and
- refugees may have experienced war and trauma, fled their home country, and lost their family, friends and the entire social fabric of their lives. Their experiences may put them at high risk for post traumatic stress disorder or depression.

## Suicide in refugee communities

While the research does not provide consistent rates for mental illness affecting immigrants who are refugees, the overall rate of mental illness is widely believed to be significantly higher than in the general Australian population.<sup>149</sup> Studies from the United States estimate the incidence of mental illness among refugee children to be 40-50%.<sup>150</sup> Closer scrutiny of this research reveals post traumatic stress disorder (PTSD), depression and anxiety disorders are diagnosed most frequently,<sup>151</sup> although a range of other mental illness and social and behavioural problems are also widely reported.<sup>152</sup> PTSD has attracted the most research attention and now constitutes a separate field of investigation in its own right. Past trauma may take the form of events experienced or witnessed, where lives have been threatened or people have been killed. Also significant is the loss of family, friends, relatives, personal belongings and possessions, livelihood, country, and social status.

The risk factors most commonly found to increase the likelihood of suicide among refugees and immigrants include exposure to violence and trauma, lack of family support, living with a mentally ill family member, family stress, being alone or unaccompanied, prolonged (more than 6 months) incarceration in immigration detention centres,<sup>153</sup> poor coping skills and resettlement stress. Poverty, discrimination and acculturation stress are all thought to be linked to low self-esteem, depression and suicide attempts.<sup>154</sup> Enduring stresses around housing, physical illness, quality of relationship with their partner, and finances are also associated with elevated risk of mental illness and suicide-related behaviours.

### Implications for suicide prevention activities and interventions

Positive experiences in the new country contribute favourably to mental health and wellbeing. Studies of immigrants and refugees suggest that social support and cultural integration are protective factors for suicide among immigrants.<sup>155</sup> Migration can be a very stress-inducing phenomenon, but experiences differ both pre and post migration<sup>156</sup> and mental illness is a significant risk factor for suicide among refugees. Suicide prevention activities need to specifically address this issue.

Effective suicide prevention activities in refugee communities need to include culturally appropriate mental health interventions, particularly for people who have experienced pre-migration torture and trauma, refugee camp internment, periods of containment in immigration detention and post-migration stresses.<sup>157</sup>



Positive experiences  
in a new country  
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and wellbeing.



# Evidence of what works in suicide prevention

The high incidence of suicide worldwide has prompted a wide range of suicide prevention initiatives, including comprehensive national suicide prevention programs in Australia, New Zealand, the United Kingdom, USA and many other countries. Appendix C summarises the main objectives of suicide prevention strategies in a number of countries.

## Types of prevention programs

Suicide prevention programs can take many forms. A popular framework involves three types of preventative interventions: *universal*, *selective* and *indicated*.<sup>158-160</sup> *Universal* prevention refers to activities targeting the general population (e.g. health promotion and education); *selective* interventions are aimed at specific at-risk populations (e.g. psychiatric patients); while *indicated* strategies address specific high-risk individuals showing early signs of suicidality. This model formed the basis of the *Living Is For Everyone (LIFE) A Framework for Prevention of Suicide and Self-harm in Australia*<sup>161</sup>, when it was introduced in 2000<sup>162</sup> and has been further developed in *LIFE (2007)*.

Across these three broad categories, five major types of interventions have been regularly undertaken and researched: suicide awareness and education programs for the general public, primary care physicians and gatekeepers; screening of at-risk individuals; treatment for individuals who attempt suicide (including pharmacotherapy, psychotherapy, follow-up care); restricting access to means of suicide; and media guidelines for responsible reporting of suicide.<sup>163</sup> Following the United Nations Guidelines for National Suicide Prevention Strategies<sup>164</sup>, a number of governments have adopted comprehensive approaches across these domains, as well as interventions for people bereaved by suicide (see Appendix C).

Evidence about the effectiveness of suicide prevention activities is quite limited, both in Australia and elsewhere. However, evidence from other countries suggests that physician education in the recognition and treatment of depression, gatekeeper training, and restricting access to lethal means of suicide are promising approaches that may have an impact on suicide rates.<sup>165-167</sup> Caution is required in relation to such evidence, as study design, the location and sample characteristics can have a significant effect on outcomes.<sup>168</sup>

## Training for health professionals

A postgraduate educational program on the diagnosis and treatment of depression offered to all general practitioners on the island of Gotland in Sweden in the early 1980s was linked to a significant decline in suicide rates on the island and other related outcomes (including an increase in prescription of antidepressants).<sup>169-170</sup> However, the impact of primary care physician education on suicide rates on Gotland was time-limited and mostly with females.<sup>171</sup> There are no published data on the impact of similar programs on suicide rates in other countries. Several education programs for general practitioners and other health care professionals in Australia have produced positive outcomes in terms of increased knowledge and skills regarding detection of at-risk patients, but there is no evidence regarding long-term changes in clinical practice or reduction of actual suicide rates.<sup>172-173</sup>

## Gatekeeper training

One of the most effective gatekeeper training programs was a suicide prevention program initiated within the US Air Force in 1996.<sup>174</sup> The program aimed at reducing suicide risk factors and enhancing protective factors, including changing policies and social norms, reducing the stigma of help-seeking for mental illness and improving awareness of mental health issues.

It achieved a 33% decline in suicide rate as well as reductions in levels of other related problems, such as accidental deaths, homicide and incidents of domestic violence among the Air Force personnel. However, the program was implemented in a highly structured military environment with formalised gatekeeper roles and referral pathways, and similar programs carried out in other settings (e.g. schools, workplaces) have had less impressive results.<sup>175</sup>

## Restricting access to means of suicide

Restricting the availability of means of suicide (e.g. guns, domestic gas, barbiturates) has been linked to significant reductions in suicide rates:<sup>176 177</sup>

- research on the impact of the reform to gun laws in Australia has shown a significant decline in suicides using firearms and no evidence that alternative methods have been substituted.<sup>178 179</sup> The authors concluded that *'had the gun law reforms not occurred, more Australians contemplating suicide—in particular, impulsive young people—might have more easily found a method of instant (suicide) completion'* (p370).
- restriction of access to barbiturates in Australia in the 1960s was associated with a 23% drop in suicide using this method, without an increase in the use of other means (i.e. through means substitution).<sup>180</sup>

Although means restriction has been shown to be one of the most effective approaches to preventing suicide worldwide, it requires constant monitoring to determine frequently used suicide methods, and levels of compliance with access restrictions (e.g. firearm legislation). Policies and initiatives have to be adjusted accordingly, and the possibility of method substitution must also be taken into consideration.<sup>181</sup> In Australia, the most common method of suicide at present is hanging, making up almost half of all suicide deaths. Hanging is a particularly difficult method of suicide to prevent, as means are readily available and almost impossible to restrict.

## Clinical interventions

### Counselling and related therapies

Other approaches to suicide prevention also appear promising, although there is a lack of strong scientific evidence to prove their effectiveness in preventing someone from taking their own life.<sup>182</sup> Initiatives include clinical interventions for people with a history of suicide attempts (e.g. improving adherence to treatment and better patient follow-up), and counselling and psychotherapy for mental illness. Therapies such as dialectical-behavioural therapy (see below), problem-solving therapy, and provision of an emergency card alerting others to an individual's history of suicide-related behaviours have been shown to reduce repeated suicide attempts and self-harm.<sup>183-185</sup>

Dialectical behaviour therapy (DBT) was developed as therapy for women with borderline personality disorder engaging in repeated deliberate self-harm, including suicide attempts.<sup>186</sup> DBT uses cognitive and behavioural techniques to enhance interpersonal communication, develop skills to cope with emotional distress, regulate emotions and improve self-help. DBT has been scientifically evaluated and proven to be an effective treatment for this group of women.<sup>187</sup>

### Medication

Medication for major mood and psychotic disorders, such as depression, bipolar disorder and schizophrenia, may reduce the risk of suicide within these groups.<sup>188-190</sup> However, despite numerous studies, the role of antidepressants in reducing the risk of suicide remains unclear.<sup>191 192</sup>

Evidence... suggests that physician education in the recognition and treatment of depression, gatekeeper training and restricting access to lethal means of suicide... may have an impact on suicide rates.



## Community capacity-building approaches

A wide range of general population and community-based suicide prevention programs may also lead to positive outcomes, although there is limited scientific evidence of their impact on suicide rates.<sup>193</sup> Examples are:

- crisis centres and counselling;
- public awareness, education and mental health literacy programs;
- screening for depression and suicide risk in educational and primary care settings;
- school-based competency and skill enhancement programs; and
- support for suicide survivors and communities bereaved by suicide.

Many phone-based crisis counselling services worldwide have been operational for decades and data shows that both individuals in crisis and third parties concerned about somebody else's wellbeing, frequently use these services.<sup>194</sup> Positive results are reported in anecdotal evidence, as well as studies examining 'clients and counsellors' satisfaction with the services provided, repeat use of services and referral outcomes.<sup>195 196</sup> However, studies assessing the services' impact upon actual suicide rates have yielded inconclusive results. Some studies show that suicide hotlines may help to reduce suicide rates among particular groups (e.g. young white females).<sup>197 198</sup>

As an example, a community-based phone support program for the elderly established in Italy produced promising results.<sup>199</sup> Ten years after the introduction of the service, suicide rates amongst people over 65 years of age were significantly lower than the general population.<sup>200</sup> Similar studies are underway in Australia.

## Addressing media coverage of suicide

There is strong evidence linking media reports of suicide to increased suicide rates both overseas and in Australia.<sup>201 202</sup> Consequently, many countries have developed guidelines for responsible coverage of suicide, including a resource for media professionals in Australia.<sup>203</sup> There have been promising results from some overseas studies demonstrating a link between media guidelines and a reduction in suicide rates.<sup>204</sup>

More recently, research on the impact of media guidelines in Australia has found convincing evidence that these guidelines have had an impact on the quality of reporting of suicides as well as on reducing suicide-related behaviours.<sup>205</sup>

Further information about the research and evidence relating to media reporting and portrayal of suicide can be found at [www.mindframe-media.info](http://www.mindframe-media.info).





## Collaborative approaches to suicide prevention

It has been recognised by governments across Australia that structures and systems with hierarchical control and linear systems of accountability are not adequate for addressing complex social issues such as suicide prevention.<sup>206 207</sup>

The traditional delivery of programs from multiple departments and diverse agencies, described as the 'shower head effect,' can result in duplication of effort, confusion of responsibility and accountability, and the potential for systemic waste of scarce resources.

In the United Kingdom as early as 1975, the Central Policy Review Staff (in the Office of Cabinet) published a report entitled 'A Joint Framework for Social Policies', which flagged the need:

- (1) *'to improve coordination between services, as they affect individuals,*
- (2) *to provide better analysis of complex problems cutting across service boundaries and*
- (3) *to develop a collective view among ministers on priorities between different programs, problems and groups'.*<sup>208</sup>

Internationally, the 'shower head' is increasingly giving way to 'pooled resourcing', devolved decision-making, connection and cooperation between central, line and operational agencies and community engagement.<sup>209</sup>

Australian governments have commenced and continue to launch initiatives for joined-up government including through a range of Council of Australian Government (COAG) agreements.<sup>210</sup>

The need for greater coordination and collaboration in the delivery of suicide prevention programs can be seen in the range and type of current government policies and strategies that overlap with the suicide prevention initiative (**Figure 16**). The two major policy areas that overlap with suicide prevention are the National Mental Health Strategy and the National Drug Strategy. However, there are many other strategies which target specific special interest groups that also link closely with the suicide prevention initiative (for example the *Social and Emotional Wellbeing Framework: A National Strategic Framework for Aboriginal and/or Torres Strait Islander Peoples Mental Health and Emotional Wellbeing*).<sup>211</sup>

Australian governments have already set the framework for possible coordination and collaboration. Suicide prevention, in particular, is an area that lends itself to whole-of-government and across government approaches. The decision to take one's own life has multiple causes and suicide prevention is complex, and the knowledge and resources to deal with suicide and suicide prevention are located across many sectors. There are a number of agencies operating under shared goals of reducing suicide, and there are many government agencies (health, human services, communities, families, community development) and non-government service providers involved in service delivery, particularly with high risk populations or individuals. And there are many overlapping government policies and strategies that have an impact on suicide prevention (as shown in **Figure 16**).

To improve cooperation and collaboration for the prevention of suicide in Australia, action is needed at three levels:

- *Structural level*, including tools for effective collaborative governance and project management in suicide prevention. Given the range of government and non-government agencies in suicide prevention, the introduction of joint planning and implementation could be expected to deliver both a better policy framework and a more seamless service delivery. There are a range of publicly available guidelines for structural changes that can significantly improve the delivery of joined-up services and improve cooperation, collaboration and the better integration of suicide prevention policy and service delivery;<sup>212</sup>
- *Systems level*, including sharing of information, budgeting and reporting; and
- *Cultural level*, including the attitudes and beliefs that underlie a group's functions and behaviour. If the *Living Is For Everyone* initiative is to be successful, it will need to harness the emerging cultural changes within government and service providers towards collaborative service delivery at the local level.

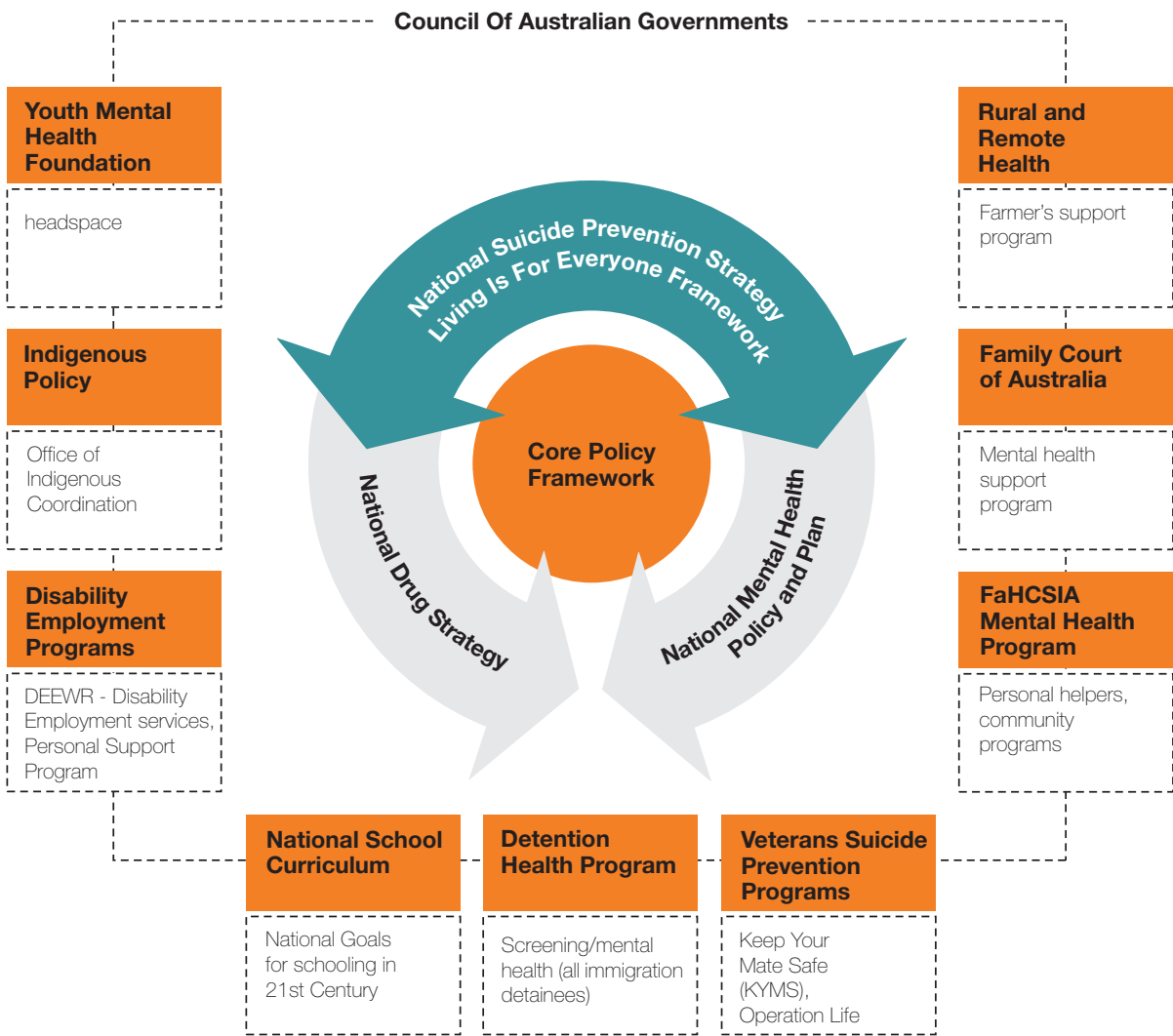
Ten principles have been broadly promoted across government to be applied to achieve coordinated service provision.<sup>213-217</sup> They are:

1. A long-term commitment to resources: Preferably five years or more, but a minimum of three years.
2. A client focus: The client's experience of services and support is central to policy development and service delivery.
3. A focus on outcomes: A balance of short-term and long-term results and clear overall outcome, with timely reporting.
4. Shared knowledge: An open, common set of resources and knowledge.
5. Facilitation: Central agencies facilitating and enabling, rather than controlling and directing.
6. Activities that augment, complement and supplement: Policy makers collaborating with service deliverer and the community sector to augment, complement and supplement existing programs and services to deliver the policy objectives.
7. Local capacity and ownership: Engaging local leaders across sectors (business, community, government).
8. Partnership and reciprocity: Recognising that complex social issues require genuine cross-sectoral partnerships – within and beyond government – and a shared responsibility for outcomes.
9. Devolution and flexibility: Policy frameworks are broad and flexible enough to enable devolution of service planning and delivery to the local or regional level.
10. Provision of incentives: Incentives such as funding and recognition of autonomy can all be used to stimulate change.





FIGURE 16: Linking suicide prevention to other related government policies and strategies



# Evaluation of suicide prevention programs

Systematic evaluation of all suicide prevention projects, activities and programs is essential for the continued development of best practice. It will ensure that interventions are based on a solid foundation of evidence, that resources and effort are allocated appropriately, and that the required outcomes and impacts can be achieved.

## Challenges in evaluating suicide prevention program effectiveness

Despite the large number of suicide prevention initiatives internationally and in Australia, few have been properly evaluated for their effectiveness and impact.<sup>218-221</sup>

There are several reasons for this, including short program duration, the diversity of risk populations being targeted by programs, and methodological difficulties (e.g. small sample sizes, lack of control groups and using retrospective evaluations).<sup>222-223</sup>

Despite the immeasurable human tragedy of each suicide and the distress of those left in its wake, from a statistical point of view, death by suicide is a relatively rare event, with approximately 1 suicide death per 10,000 people in the Australian population per year.<sup>224</sup>

This causes a serious dilemma regarding the choice of the most appropriate measures to be used when evaluating suicide prevention programs. Given that 0.01% of the Australian population dies by suicide each year, studies evaluating the effectiveness of suicide prevention programs require very large sample sizes to produce accurate and meaningful results if the only measure of success used is suicide rate reduction. To prove that an intervention results in a 15% reduction in the national suicide rate, a study sample of almost 13 million people would be required.<sup>225</sup>

The measures used to evaluate suicide prevention programs therefore should also include, in addition to reductions on suicide rates, the prevalence of suicide attempts; suicide-related behaviours; thinking or communication; changes in predisposing vulnerabilities (e.g. mental illness, hopelessness); and protective factors (e.g. coping skills, help-seeking behaviour, compliance with treatment for mental illness, social connectedness, mental health literacy).<sup>226-229</sup> In addition, current evidence shows that there are significant differences between people who attempt suicide and those who die by suicide, suggesting that studies involving people who attempt suicide may not be applicable to those who suicide. There is also limited evidence to support the notion of a pathway to suicide from suicidal thinking to completion, or on the effectiveness of factors that may protect against suicide-related behaviours.<sup>230-232</sup>

Moreover, suicide rates are influenced by a multitude of variables, many of which cannot be controlled. In fact, bigger reductions in the incidence of suicide have been observed in some cases following naturally occurring socio-economic changes (e.g. major economic fluctuations, wars, changes in political situation) rather than through purposefully implemented national suicide prevention strategies.<sup>233-236</sup>

## The importance of ongoing evaluation

Despite a large amount of research and literature in the area, suicide prevention remains an inexact process based on limited scientific evidence.<sup>237</sup> Although there is evidence suggesting that some suicide prevention approaches may reduce suicide rates (e.g. restricting means, primary care physician education and gatekeeper training), there is an urgent need for continued development of well planned, evidence-based programs and research evaluating their effectiveness in Australia.<sup>238-243</sup>

All suicide prevention initiatives should be guided by current evidence and include an evaluation component based on meaningful and measurable outcomes. This will allow the critical components of effective suicide prevention programs to be identified and refined, and to guide future suicide prevention efforts.

Suicide prevention programs should also monitor any negative or harmful effects that may occur, always ensuring that an intervention follows the guiding principle of 'first, do no harm.'<sup>244</sup>

Suicide prevention initiatives should be multimodal and complementary, targeting a wide range of high risk groups. The diverse approach to suicide prevention is essential because there is no single, readily identifiable, high-risk population that constitutes a sizeable proportion of overall suicides and yet is small enough to target easily and have an effect.<sup>245</sup>

Many national suicide prevention programs focus on universal, population-wide interventions (e.g. public awareness education, mental health literacy programs), somewhat neglecting the selective and indicated approaches and sometimes overlooking certain high-risk groups.<sup>246</sup> There is a need to strike a balance between population-based approaches, and interventions with high-risk groups that focus on identifying and managing suicide-related behaviours and mental illness.

Materials to guide and assist the evaluation of suicide prevention programs have been developed under the National Mental Health Strategy<sup>249</sup> and to support implementation of the *LIFE Framework*.<sup>250</sup>



# Appendix A:

## Life events and suicide – emerging issues

Literature on the impact of life events on mental illness or their impact on suicide and suicidal thinking has only recently emerged. There is very little validated or rigorously reviewed research on the link between life events and suicide. The material in this appendix should be treated as indicative only – until more definitive and validated research has been undertaken and published.

### Recent Australian research on life events

Recent research undertaken in Australia involving feedback from over three hundred people bereaved by suicide identified some of the critical life events influencing suicide. The results are shown in **Figure A1**. Depression or emotional problems were identified as present in 68% of cases; family conflict in 45%; mental illness in 36%; substance abuse in 34%; financial problems in 30%; physical health problems in 21%; and family history of suicide in 13% (from a list of possible factors provided in the survey).<sup>247</sup>

As **Figure A1** shows, in the opinion of people bereaved by suicide in this national sample, there are significant differences between men and women in terms of which life events seem to have been most influential in their ending their own life. Based on this study, men who have suicided are more likely than women to have been involved in substance abuse (alcohol or illicit drugs) or had financial problems. On the other hand, women who have ended their life were more likely to have had mental health issues (other than depression) or to have experienced depression or emotional problems.

These results appear to support the results of studies that have been undertaken by the Coroner's Office in the Central Coast of New South Wales (data collected and analysed every year since 1995 combining police, medical and post-mortem data with information provided by surviving family and friends).<sup>248</sup>

**Figure A2** and **Figure A3** show the most common life events associated with those in the Central Coast of NSW who chose to end their own lives at some time over the past ten years (this analysis is based on data from 279 suicide cases recorded in the Coronial Database in NSW Central Coast). **Figure A3** shows how the life events vary for this sample by gender – females were more likely than males to have had a previous suicide attempt, have a history of sexual abuse, had recent treatment for depression or be bereaved. Males in this sample were more likely to have had relationship, physical or financial problems, recent (past twelve months) criminal record or criminal issues, alcohol/drug/substance abuse or mental illness other than depression.

However, there is no data available showing whether the pattern of life events shown in **Figure A2** and **Figure A3** is the same for people on the NSW Central Coast who did not take their own lives. Where national data is available for the general population, it is indicated with a grey circle (see **Figure A3**).

Appendix A:  
Life events and suicide-emerging issues  
(continued)

FIGURE A1: Life events that have impacted on a selection of recent suicides in Australia

Personal characteristics of the deceased	% of male deceased	% of female deceased	% of all deceased
depression or emotional problems	66	77	68
family or relationship conflict	46	40	45
mental health issues	32	58	36
alcohol/drug/substance abuse	38	7	34
financial problems	32	16	30
physical health issues	20	28	21
family history of suicide	13	9	13

more frequent for males

more frequent for females

(Source: Research into suicide bereavement by the authors, 2006)

## Appendix A: Life events and suicide-emerging issues (continued)

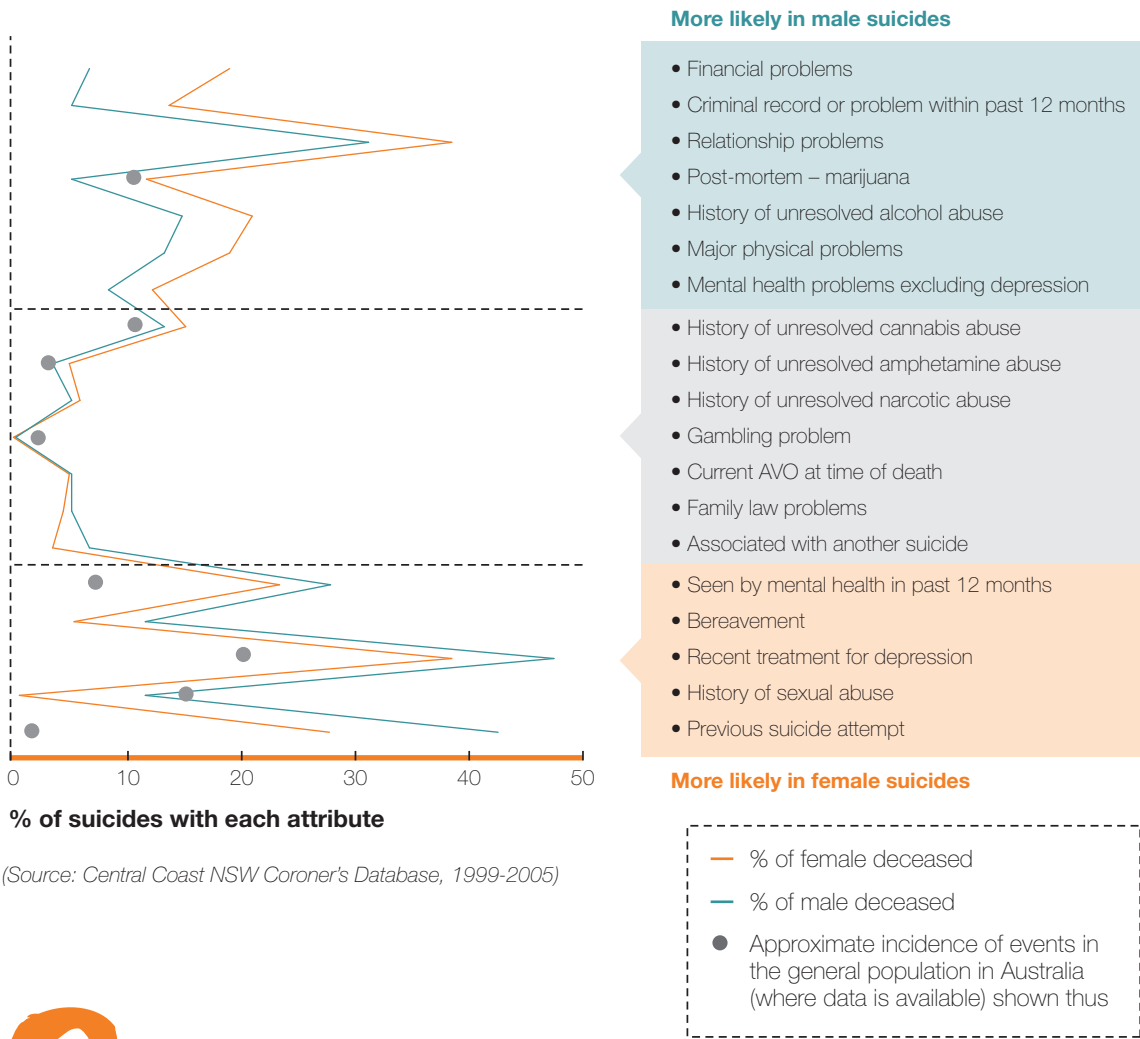
**FIGURE A2:** Life events that are linked to suicides in the NSW Central Coast Region (1999 to 2005)

Life events	% of all deceased
recent treatment for depression	40
relationship problems	37
previous suicide attempts	31
seen by mental health worker in past 12 months	25
history of unresolved alcohol abuse	20
major physical problems	18
financial problems	17
history of unresolved cannabis abuse	15
criminal record or problem within past 12 months	13
mental health problems excluding depression	12
post-mortem – marijuana	11
bereavement	8
history of unresolved narcotic abuse	7
current AVO at time of death	6
family law problems	6
history of unresolved amphetamine abuse	6
associated with another suicide	5
history of sexual abuse	4
gambling problem	1

(Source: Central Coast NSW Coroner's Database, 1999-2005) <sup>248</sup>

# Appendix A: Life events and suicide-emerging issues (continued)

**FIGURE A3:** Life events that distinguish between male and female suicides in NSW Central Coast Region



# Appendix B:

## Incidence of death (suicide and self-inflicted injuries) in regions of Australia

There is wide variability in the incidence of death by suicide or self-inflicted injuries throughout Australia. The following charts compare the rates (per 100,000 people) with the number deaths by suicide or self-inflicted injuries for Australian statistical divisions between 2001-2004.

**Figure B1** plots the suicide numbers (x axis) and the suicide rates (y axis) highlighting three patterns of suicide-related behaviours across Australia. This makes it possible to identify statistical divisions where suicide prevention activities could be focussed.

The three groupings of statistical divisions are as follows:

1. Areas with low absolute numbers of suicides and self-inflicted injuries but high rates (per 100,000)  
e.g. Bathurst-Melville, Mackay City Part A, Mandurah, Rockhampton and Litchfield Shire (shown at the top left of **Figure B1**)
2. Areas with high numbers of suicides and self-inflicted injuries but low rates (per 100,000) e.g. Brisbane and Newcastle (shown at the bottom right of **Figure B1**)
3. Areas with comparatively high numbers and high rates of suicide and self-inflicted injuries e.g. North Metropolitan Perth, South East Metropolitan Perth, South Metropolitan Perth, East Metropolitan Perth, Northern Adelaide, Western Adelaide, Cairns City Part A and Greater Hobart.

Some of the differences shown in **Figure B1** can be attributed to variations in the population and geographic area covered by each statistical division. Many of the areas identified in **Figure B1** are in rural/remote Australia or have a high Indigenous population, both of which are known risk factors for suicide. Others are in major Australian cities, particularly Perth, Adelaide, Cairns and Hobart, due to the comparatively larger number of suicides occurring in these areas.

**Figure B2** has zoomed in on the data from **Figure B1**, focusing on the regions in Australia that have relatively high rates and relatively high numbers of suicide (excluding the two outlying locations - Bathurst/Melville and Brisbane City, from **Figure B1**). The areas shown as triangles are those that require considerable attention and support for preventing suicide over the coming years. The wide variability geographically is most likely a result of several factors - social, cultural, economic and environmental, rather than psychological factors.

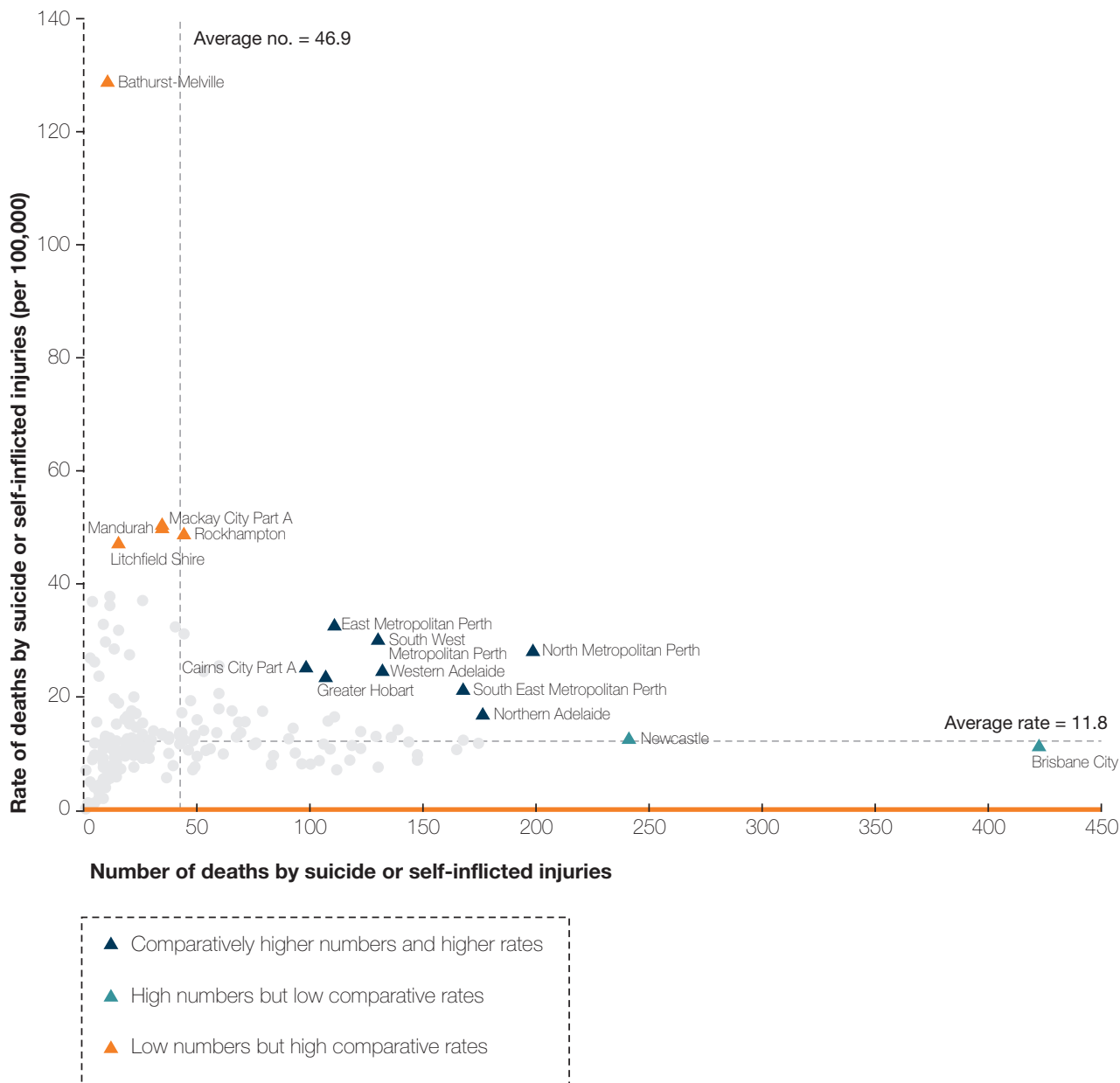


There is urgent need for continued development of well planned, evidence-based programs and research evaluating their effectiveness in Australia.



## Appendix B: Incidence of death (suicide and self-inflicted injuries) in regions of Australia (continued)

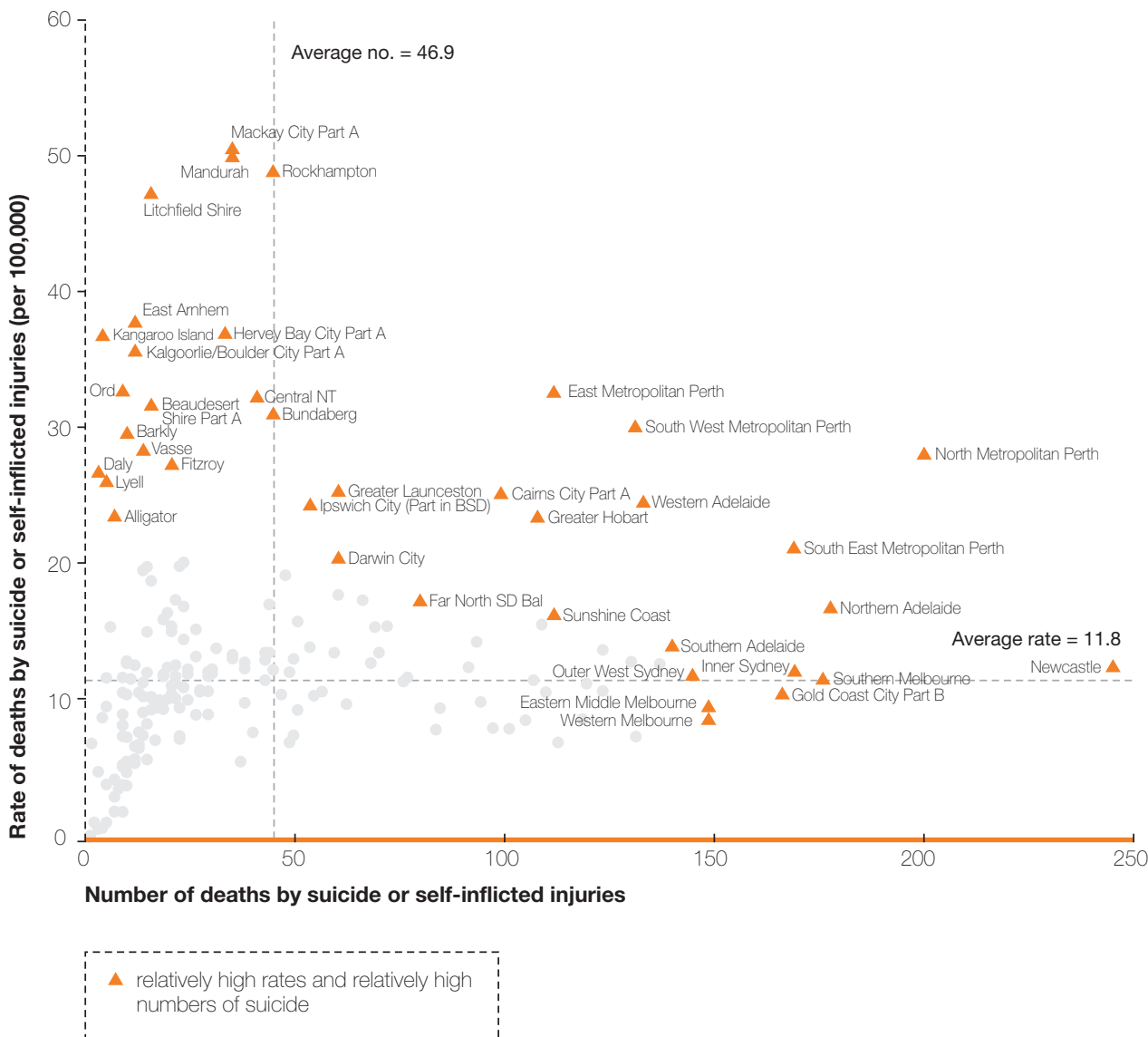
FIGURE B1: Comparing deaths by suicide or self-inflicted injuries (number and rates) in Australia (2001-2004)



(Adapted from Public Health Information Development Unit, University of Adelaide, 2006)

# Appendix B: Incidence of death (suicide and self-inflicted injuries) in regions of Australia (continued)

**FIGURE B2:** Comparing deaths by suicide or self-inflicted injuries (number and rates) across Australian Statistical Divisions (2001-2004) – **zooming in on Figure B1** (excludes Bathurst-Melville and Brisbane City)



(Adapted from Public Health Information Development Unit, University of Adelaide, 2006)

# Appendix C:

## Examples of overseas suicide prevention strategies

Objectives	New Zealand	England	Scotland
<b>Universal</b> (activities that apply to everyone)	<ul style="list-style-type: none"> <li>Promote mental health and wellbeing, and prevent mental health problems</li> </ul>	<ul style="list-style-type: none"> <li>To promote mental wellbeing in the wider population</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring greater public awareness of positive mental health and wellbeing, suicidal behaviour, potential problems and risks amongst all age groups and encouraging people to seek help early</li> </ul>
<b>Selective</b> (activities that apply to communities and groups 'at risk')	<ul style="list-style-type: none"> <li>Improve the care of people who are experiencing mental disorders associated with suicidal behaviours</li> </ul>	<ul style="list-style-type: none"> <li>To reduce risk in key high risk groups</li> </ul>	<ul style="list-style-type: none"> <li>Providing earlier intervention and support to prevent problems and reduce the risks that might lead to suicidal behaviour</li> <li>Providing on-going support and services to enable people to recover and deal with the issues that may be contributing to their suicidal behaviour</li> </ul>
<b>Indicated</b> (activities that apply to times of heightened risk)	<ul style="list-style-type: none"> <li>Improve the care of people who make non-fatal suicide attempts</li> <li>Support families/whanau (extended family), friends and others affected by a suicide or suicide attempt</li> </ul>		<ul style="list-style-type: none"> <li>Providing support and services to people at risk and people in crisis, to provide an immediate crisis response and to help reduce the severity of any immediate problem</li> <li>Providing effective support to those who are affected by suicidal behaviour or a completed suicide</li> </ul>

## Appendix C: Examples of overseas suicide prevention strategies (continued)

Objectives	New Zealand	England	Scotland
<b>Research and evidence</b> (improving our understanding of the key issues in suicide prevention)	<ul style="list-style-type: none"> <li>Expand the evidence about rates, causes and effective interventions</li> </ul>	<ul style="list-style-type: none"> <li>To promote research on suicide and suicide prevention</li> </ul>	<ul style="list-style-type: none"> <li>Improving the quality, collection, availability and dissemination of information on issues relating to suicide and suicidal behaviour and on effective interventions to ensure the better design and implementation of responses and services and use of resources</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Promote the safe reporting and portrayal of suicidal behaviour by the media</li> </ul>	<ul style="list-style-type: none"> <li>To improve reporting of suicidal behaviour in the media</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring that any depiction or reporting by any section of the media of a completed suicide or suicidal behaviour is undertaken sensitively and appropriately and with due respect for confidentiality</li> </ul>
<b>Access to means</b>	<ul style="list-style-type: none"> <li>Reduce access to the means of suicide</li> </ul>	<ul style="list-style-type: none"> <li>To reduce the availability and lethality of suicide methods</li> </ul>	
<b>Other</b>		<ul style="list-style-type: none"> <li>To improve monitoring of progress towards Saving Lives: Our Healthier Nation target to reduce suicides</li> </ul>	

## Appendix C: Examples of overseas suicide prevention strategies (continued)

Objectives	Northern Ireland	Ireland
<b>Universal</b> (activities that apply to everyone)	<ul style="list-style-type: none"> <li>To raise awareness of mental health and well being issues</li> </ul>	<ul style="list-style-type: none"> <li>To promote positive mental health and well being and bring about positive attitude change towards mental health, problem solving and coping in the general population</li> </ul>
<b>Selective</b> (activities that apply to communities and groups 'at risk')	<ul style="list-style-type: none"> <li>To ensure early recognition of mental ill-health, and to provide appropriate follow-up action by support services</li> <li>To provide appropriate training for people dealing with suicide and mental health issues</li> <li>To develop coordinated, effective, accessible and timely response mechanisms for those seeking help</li> <li>To enhance the support role currently carried out by the voluntary/community sectors, bereaved families and individuals who have made previous suicide attempts</li> </ul>	<ul style="list-style-type: none"> <li>To reduce the risk of suicidal behaviour among high risk groups and vulnerable people</li> </ul>
<b>Indicated</b> (activities that apply to times of heightened risk)		<ul style="list-style-type: none"> <li>To minimise the distress felt among families, friends and in a community following a death by suicide and ensure that individuals are not isolated or left vulnerable so that the risk of any related suicidal behaviour is reduced</li> </ul>
<b>Research and evidence</b> (improving our understanding of the key issues in suicide prevention)	<ul style="list-style-type: none"> <li>To provide support for research evaluation of relevant suicide and self-harm issues</li> </ul>	<ul style="list-style-type: none"> <li>To improve access to information relating to suicidal behaviour and on where and how to get help, and to encourage suicide research and improve access to research findings</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>To support the media in the development and implementation of guidelines for a suitable response to suicide-related matters</li> </ul>	
<b>Access to means</b>	<ul style="list-style-type: none"> <li>To restrict access, where possible, to the means of carrying out suicide</li> </ul>	
<b>Other</b>		

## Appendix C: Examples of overseas suicide prevention strategies (continued)

Objectives	USA	Canada
<b>Universal</b> (activities that apply to everyone)	<ul style="list-style-type: none"> <li>Promote awareness that suicide is a public health problem that is preventable</li> <li>Develop broad-based support for suicide prevention</li> <li>Develop and implement strategies to reduce the stigma associated with being a consumer of mental health, substance abuse and suicide prevention programs</li> </ul>	<ul style="list-style-type: none"> <li>Promote awareness in every part of Canada that suicide is our problem and is preventable</li> <li>Develop broad-based support for suicide prevention and intervention</li> <li>Develop and implement a strategy to reduce stigma, to be associated with all suicide prevention, intervention and bereavement activities</li> <li>Increase the number of primary prevention activities</li> </ul>
<b>Selective</b> (activities that apply to communities and groups 'at risk')	<ul style="list-style-type: none"> <li>Implement training for recognition of at-risk behaviour and delivery of effective treatment</li> <li>Develop and promote effective clinical and professional practices</li> <li>Increase access to and community linkages with mental health and substance abuse services</li> <li>Develop and implement community-based suicide prevention programs</li> </ul>	<ul style="list-style-type: none"> <li>Increase training for recognition of risk factors, warning signs and at-risk behaviours and for provision of effective intervention, targeting key gatekeepers, volunteers and professionals</li> <li>Develop and promote effective clinical and professional practice (effective strategies, standards of care) to support clients, families and communities</li> <li>Improve access and integration with strong linkages between the continuum-of-care components/services/families</li> <li>Develop, implement and sustain community-based suicide prevention programs, respecting diversity and culture at local, regional, and provincial/territorial levels</li> <li>Prioritise intervention and service delivery for high-risk groups while respecting local regional, and provincial/territorial uniqueness</li> </ul>
<b>Indicated</b> (activities that apply to times of heightened risk)		<ul style="list-style-type: none"> <li>Increase crisis intervention and support</li> <li>Increase services and support to those bereaved by suicide</li> </ul>
<b>Research and evidence</b> (improving our understanding of the key issues in suicide prevention)	<ul style="list-style-type: none"> <li>Promote and support research on suicide and suicide prevention</li> <li>Improve and expand surveillance systems</li> </ul>	<ul style="list-style-type: none"> <li>Promote and develop suicide-related research</li> <li>Improve and expand surveillance systems</li> <li>Promote and support the development of effective evaluation tools</li> <li>Increase opportunities for reporting</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Improve reporting and portrayals of suicidal behaviour, mental illness and substance abuse in the entertainment and news media</li> </ul>	<ul style="list-style-type: none"> <li>Increase media knowledge regarding suicide</li> </ul>
<b>Access to means</b>	<ul style="list-style-type: none"> <li>Promote efforts to reduce access to lethal means and methods of self-harm</li> </ul>	<ul style="list-style-type: none"> <li>Reduce the availability and lethality of suicide methods</li> </ul>
<b>Other</b>		<ul style="list-style-type: none"> <li>Increase funding and support for all activities connected with the CASP Blueprint for a Canadian National Suicide Prevention Strategy</li> </ul>

# Appendix D:

## Review of suicide risk factors

NOTE: This Appendix and the analysis and categorisation of the evidence has been prepared by Professor Diego De Leo and Dr Karolina Kryszynska from The Australian Institute for Suicide Research and Prevention (AISRAP), Griffith University, Brisbane, Queensland.

### Levels of evidence

- A. Strong evidence** (i.e. conclusive results of studies; high quality evidence-base, including extensive research reviews and meta-analyses, data from case-control psychological autopsy studies, controlled family studies, follow-up studies, clinical studies, twin studies, adoption studies, molecular genetics studies etc. where applicable and/or reliable epidemiological data) linking the risk factor to suicide.
- B. Good evidence** (i.e. reasonably conclusive results of studies; moderate evidence-base) linking the risk factor to suicide.
- C. Some evidence linking the risk factor to suicide, however more research is needed in the area.**
- D. Good evidence linking the risk factor to suicidal ideation and/or non-fatal suicidal behaviour, however more research is needed to ascertain the link to fatal suicidal behaviour.**

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Demographic factors</b> <i>Selected Australian data (for details, see listed resources)</i> Age: highest age-specific suicide rate in 2005 (ABS, 2007): 1. Males: 30-34 age group (27.5 per 100,00) 2. Females: 35-39 age group (6.9 per 100,000)  <i>Race/ethnicity:</i> over the period of 1999-2003 suicide was the leading external cause of death for Indigenous males (ABS, 2005).  <i>Geographical location:</i> over the period of 1997-2000 higher suicide rates were reported in men (especially young men) in rural and remote populations (40.4 and 51.7 per 100,000, respectively) compared with metropolitan populations (31.8 per 100,000).	Gender: male	A	ABS (2007)*
	Age: middle-age and elderly	A	De Leo et al. (2006)*
	Race and ethnicity: ATSI	A	ABS (2005)* De Leo et al. (2006)* Hunter and Milroy (2006)*
	Geographical location: rural and remote	A	Caldwell et al. (2004)* De Leo et al. (2006)* Judd et al. (2006a)* Judd et al. (2006b)* Taylor et al. (2005)*

\* Studies conducted in Australia



## Appendix D: Review of suicide risk factors (continued)

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Psychopathology and psychiatric hospitalisation</b> <i>Comment:</i> A diagnosis of a mental disorder is among the strongest risk factors for both non-fatal and fatal suicidal behaviour, and psychiatric comorbidity (i.e. a diagnosis of more than one mental disorder) increases the risk even further. The overwhelming majority of people who die by suicide have a diagnosis of a psychiatric disorder, especially affective disorders, substance-related disorders, and schizophrenia. Psychopathology, particularly affective disorders, substance abuse, anxiety disorders, and personality disorders, is also a serious risk factor for suicide attempts. It has to be noted; however, that only a relatively small proportion of individuals with a psychiatric diagnosis engage in suicidal behaviour, and psychopathology alone is not a sufficient predictor of suicide: other risk and protective factors play a very important role. These include quality and availability of mental health services, effectiveness of treatment, compliance with medication, and availability and quality of social support. Also, being hospitalised in a psychiatric institution tends to increase the risk of suicide, and risk is significantly increased within the first weeks after discharge from a psychiatric hospital, and it remains elevated for up to six months after discharge.	<b>Mood disorders</b> (incl. major depression and bipolar disorder)	A	Arseneault-Lapierre et al. (2004) Bertolote et al. (2004) Bostwick & Pankratz (2000) Cavanagh et al. (2003)
	<b>Schizophrenia</b> (and other psychotic disorders)	A	De Leo & Spathonis (2003) Ernst et al. (2004) Fleischmann et al. (2005) Harris & Barraclough (1997)
	<b>Substance-related disorders</b>	A	Hawton et al. (2005) Krysinska et al. (2006) Lester (2000)
	<b>Other psychiatric disorders:</b> personality disorders (esp. borderline and antisocial personality disorder), organic mental disorders, anxiety/somatoform disorders (including post traumatic stress disorder), adjustment disorder	A	Lester (2006) Snowden & Baume (2002)* Tanney (2000)
	<b>Psychiatric comorbidity</b> (i.e. a diagnosis of more than one mental disorder)	A	
	<b>Psychiatric hospitalisation and recent discharge</b>	A	Chatterton et al. (1999)* Hoyer et al. (2004) Owens et al. (2002) Qin & Nordentoft (2005) Shah & Ganesvaran (1999)*

\* Studies conducted in Australia

## Appendix D: Review of suicide risk factors (continued)

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Previous non-fatal suicidal behaviour and suicidal ideation</b> <i>Comment:</i> A history of a suicide attempt is a major risk factor for both repeated non-fatal suicidal behaviour and suicide. Approximately 1% of individuals who attempt suicide repeat their suicidal behaviour with a fatal outcome within one year after the initial attempt, and studies show that suicide risk remains significantly elevated even 5-10 years after the initial attempt. Although suicidal ideation (i.e. thoughts about self-harming and/or suicide) is quite a frequent phenomenon in the general population, in some cases vague thoughts about suicide might lead to a detailed plan followed by self-harming behaviour. The absence of a suicide plan; however, does not imply that there is no risk of suicide as many suicidal behaviours are impulsive and unplanned. Self-mutilation or self-harm (i.e. deliberate self-injurious behaviour without the intent to die) is usually distinguished from suicidal behaviours; however, individuals who engage in this type of behaviour (particularly females with a diagnosis of borderline personality disorder) might be at increased risk of suicide. Also, a history of an aborted suicide attempt (i.e. an event in which an individual has suicide intent but changes his/her mind before making the attempt and no physical injury is sustained) might have an increased risk of actual suicidal behaviour.	History of suicide attempts	A	Cheng et al. (2000) Cooper et al. (2005) Gerson & Stanley (2002)
	Suicidal ideation	A	Hawton & Harris (2006)
	Self-mutilation	B	Owens et al. (2002) Stanley et al. (2001) Thacore & Varma (2000)*
	Aborted suicide attempts	D	Barber et al. (1998) Marzuk et al. (1997)
<b>Family history of psychopathology and suicidal behaviour</b> <i>Comment:</i> Studies indicate that individuals whose relatives have a history of suicidal behaviour and diagnoses of mental disorders (especially depression and other affective disorders) have elevated levels of suicide risk. For example, adoption studies show a higher prevalence of suicide and psychiatric disorders among biological relatives of people who die by suicide than among their adoptive parents. Also, there is a higher occurrence of suicide in identical twin pairs than among non-identical twins. A variety of explanations regarding the familial vulnerability to suicide have been proposed, including social modelling (e.g. family member(s) who die by suicide may become 'role model(s)' for their relatives pointing out to suicide as an 'acceptable and effective solution' to life problems) and a genetic predisposition to psychiatric disorders (e.g. affective disorders, schizophrenia, and alcoholism) and/or impulsivity which are linked to increased risk of suicide.	Genetic factors	A	Baldessarini & Hennen (2004) Brent & Mann (2005)
	Family history of suicide and psychopathology	A	Brent et al. (2002) Roy (2006) Roy et al. (2000)

\* Studies conducted in Australia

## Appendix D: Review of suicide risk factors (continued)

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Physical status</b> <i>Comment:</i> Reviews of studies indicate that a diagnosis of a somatic illness, especially cancer, coronary heart disease, chronic pulmonary disease, neurological diseases (including epilepsy and multiple sclerosis), and HIV/AIDS is a risk factor for suicide. Also, chronic physical pain is a risk factor for suicidal ideation and behaviour.	<b>Physical illness</b> (e.g. cancer, chronic pulmonary disease, ischemic heart disease, neurological diseases, HIV/AIDS)	A	Harris & Barraclough (1994) Hawgood et al. (2004) Harwood et al. (2006a) Harwood et al. (2006b) Snowden & Baume (2002)*
	<b>Chronic physical pain</b>	A	Fishbain (1999) Tang & Crane (2006)
<b>Life events and coping potential</b> <i>Comment:</i> People who engage in non-fatal and fatal suicidal behaviour experience more stressors and negative life events than people in the general population, especially in the month prior to suicide. Relationship problems, family discord, mental and physical health problems, bereavement, imprisonment, childhood and/or adult trauma are among the most frequently reported negative life events preceding suicidal behaviour. Depending on the individual case, other types of events, including positive life changes, might also negatively affect the individual's ability to cope. It has to be noted; however, that although life stresses can be important 'triggering' risk factors for suicidal ideation and behaviour, only a minority of individuals faced with life adversities becomes suicidal, and the subjective experience of the event determines the person's reaction. Other factors, including psychopathology, ability to cope with stress and to solve problems, availability and quality of social support, and willingness to ask for help, mediate the impact of life events.	<b>Negative life events</b> (e.g. relationship problems, family discord, mental and physical health problems, loss of significant other, bereavement, imprisonment, bullying, childhood and adult trauma)	A	Fortune et al. (in press) Houston et al. (2001) Isometsa (2005) Thacore & Varma (2000)* Yufit (2005)
	<b>Low coping potential</b>	A	
<b>Marital status and sexual orientation</b> <i>Comment:</i> Marital status is associated with the level of suicide risk. Studies show that persons who are divorced, widowed or separated have the highest rates of suicide, and married people have lower suicide rates than individuals who were never married. Homosexual orientation seems to be a risk factor for nonfatal suicidal behaviour and ideation, especially among homosexual adolescents and young adults. However, based upon results of (scarce) studies conducted to date, completed suicide rates do not appear to be increased among the gay and lesbian populations.	<b>Marital status:</b> divorced, widowed, separated, single	A	Cantor & Slater (1995)* Kposowa (2000) Lorant et al. (2005) Stack (2002b)
	<b>Sexual orientation:</b> Gay, Lesbian, Bisexual, Transgender (GLBT)	D	Catalan (2000) McDaniel et al. (2001)

\* Studies conducted in Australia

## Appendix D: Review of suicide risk factors (continued)

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Socio-economic and cultural factors</b> <i>Comment:</i> Sociological studies consistently find a correlation between high suicide rates and low socio-economic status, although there are few high-status occupations at increased risk of suicide, for example dentists, physicians, and veterinarians. In addition, being unemployed elevates the risk of suicide, but the nature of the relationship between unemployment and suicide is not clear. Other socio-cultural factors, including religion and migration, also seem to impact levels of suicide risk. Lower suicide rates were reported in countries with religious sanctions against suicide, mostly countries which are predominantly Muslim or Roman Catholic. In regards to migration, rates of suicide among diverse migrant groups tend to reflect suicide rates of countries of origin with a convergence trend toward the rates of the host country observed in some studies. A migrant status could increase the risk of suicide in vulnerable individuals (for example people forced to leave their country and/or individuals with pre-existing psychopathology) due to a language barrier, stress of acculturation, and social isolation.	<b>Low socio-economic status</b>	A	Judd et al. (2006a)* Judd et al. (2006b)* Page et al. (2006)* Taylor et al. (2005)*
	<b>Unemployment</b>	A	Stack (2000a) Stack & Wasserman (2007)
	<b>Religion:</b> lack of sanctions against suicide	C	Kelleher et al. (1998) Pritchard & Amanullah (2007) Stack (2000a)
	<b>Migration:</b> high suicide rates in country of origin, acculturation stress, social isolation, language barriers	C	Burvill et al. (1982)* Burvill (1998)* Dusevic et al. (2001)* Stack (2000b)
<b>Neurobiology</b> <i>Comment:</i> Studies looking at the neurobiology of suicidal behavior show decreased levels of the cerebrospinal fluid 5-hydroxyindoleacetic acid (metabolite of serotonin) and neuroanatomical abnormalities in the ventromedial prefrontal cortex of people who attempt or die by suicide. Also, low levels of cholesterol, abnormalities in dopaminergic and noradrenergic neurotransmitter systems, and hyperactivity of other brain systems (such as the hypothalamic-pituitary-adrenal axis) might be involved in suicidal behavior, although the mechanism of the association remains unclear.	<b>Hypo-activity of serotonergic system</b>	A	Joiner et al. (2005) Mann (2003) Raust et al. (2007) Van Heeringen et al. (2004)
	<b>Other neurobiological factors:</b> abnormalities in dopaminergic and noradrenergic systems, abnormalities in the ventro-medial prefrontal cortex, hyper-activity of hypothalamic-pituitary-adrenal axis	C	Van Praag (2001)

\* Studies conducted in Australia

## Appendix D: Review of suicide risk factors (continued)

Risk factor category	Risk factor	Evidence level	Resources (selected)
<b>Psychological factors</b> <i>Comment:</i> Psychological factors might exacerbate the impact of other suicide risk factors, including psychopathology, negative life events, and social factors, and thus increase the risk of suicide in vulnerable individuals. For example, hopelessness (i.e. negative expectations regarding one's future and oneself) is one of the strongest, stronger even than depression itself, predictors of suicidal ideation and behaviour. Also, poor problem-solving, 'all-or-nothing' ('black-and-white') thinking, aggression and impulsivity, lack of reasons for living, perfectionism, and psychological suffering and pain (i.e. 'psychache') are among psychological risk factors for suicide.	Hopelessness	A	Beck et al. (1985)
	<b>Other psychological and cognitive factors:</b> high aggression and impulsivity, lack of reasons for living, cognitive rigidity, low ability to solve problems, perfectionism, psychological pain	A	Beck et al. (1990) Joiner et al. (2005) Shneidman (1993) Williams et al. (2005) Yufit (2005)
<b>Social networks</b> <i>Comment:</i> Lack of social support, isolation, and loneliness have been related to many aspects of psychopathology, ineffective coping with stress and life crises, and suicidality. People at risk of suicide are frequently described as alienated from their families and having insufficient social support, and other resources necessary to cope with life stressors. Such isolation may result from adverse life circumstances and/or inability to maintain good interpersonal networks. In addition, isolated and lonely people are at higher risk of death when they engage in suicidal behaviors: their chances of being found and rescued by others are severely reduced or nonexistent.	Social isolation	A	Bille-Brahe & Jensen (2004) De Leo et al. (1998)
	Lack of social support	A	Judd et al. (2006a)* Judd et al. (2006b)* Yufit & Bongar (1992)
<b>Environmental factors</b> <i>Comment:</i> The choice of a method of suicide depends upon several factors, including the intent and motivation behind the behaviour, the individual's familiarity with the method, cultural factors (e.g. gender socialisation, symbolic/cultural meaning of the method) and the availability of the method. Also, results of many studies indicate that inappropriate media reporting of suicide may lead to the occurrence of imitative suicides (i.e. the 'copycat' suicides/the 'Werther effect'). The amount of publicity given to the suicide story, the placement and content of the story, the social status of the deceased, and the sociocultural context seem to influence the magnitude of the Werther effect, and the young, the elderly, individuals in crisis and/or with a history of suicidal ideation seem to be particularly vulnerable to the imitative suicidal behaviour.	Easy access to and availability of lethal means of suicide	A	De Leo et al. (2002)* De Leo et al. (2003)* De Moore & Robertson (1999)* Maris et al. (2000) Wilkinson & Gunnell (2000)*
	Inappropriate media reporting of suicide	A	Hassan (1995)* Hawton & Williams (2005) Pirkis & Blood (2001) Pirkis et al. (2002)* Pirkis et al. (2006)*

\* Studies conducted in Australia

# Glossary of terms

**Aboriginal and/or Torres Strait Islander:**

see Indigenous Australians.

**Adverse life event:** An incident within one's life that has the potential to cause emotional upset, disruption, or negative health outcomes.

**Bereavement:** The period after a loss (usually through death) during which grief is experienced and mourning occurs.

**Best practice:** The use of methods (often evidence-based) that achieve improvements and/or optimal outcomes.

**Capacity building:**

*Individual* - Enhancing and/or developing personal aptitude, strength, coping and/or independence.

*Community* - The ability of a community's organisations, groups and individuals (collectively) to build their structures, systems, people and skills, so they are better able to define, implement, manage and achieve their shared objectives.

**Client-centred:** Client-centred therapy or the person-centred approach is a movement associated with humanistic psychology that emphasises 'the capacity of each individual to arrive at a personal understanding of his or her destiny, using feelings and intuition rather than being guided by doctrine and reason. Rather than focusing on the origins of client problems in childhood events (psychodynamic) or the achievement of new patterns of behaviour in the future (behavioural), ...concentrate on the 'here and now' experiences of the client'.<sup>1</sup>

**Clinical paradigm:** This paradigm focuses on repairing damage within a disease or medical model of human functioning.

**Cognitive:** Mental processes and conscious intellectual activities such as planning, reasoning, problem solving, thinking, remembering, reasoning, learning new words or imagining.

**Common factors:** Features of therapy that are common to success, despite the differing theoretical position of each therapist and the specific techniques used.

**Community ownership:** A community takes responsibility for an issue, such as suicide, and agrees to work together to develop effective and sustainable solutions.

**Connectedness:** Enquiry into protective factors for suicide has focused on the capacities within people ('resilience factors') and on external 'protective factors'<sup>2</sup>, including a person's sense of belonging and connectedness with others. There is evidence that connections with family, school or a significant adult can reduce risk of suicide for young people. Feelings of connectedness to a partner or parent or responsibility for care of children appear to be protective factors, and 'connectedness' within a community has been linked to health and wellbeing.

**Contagion or imitation:** Suicidal thinking and/or behaviour resulting from exposure to suicide.

**Continuing care:** Engagement with longer-term treatment, support and care where needed.

**Deliberate self-harm:** Any behaviours causing destruction or alteration of body tissues, with or without the intent to die. It includes self-injury, attempted suicide and other forms of intentional injury to self.

**Distal factors:** see risk factors.

**Effectiveness:** Whether there is the capacity to bring about an effect or outcome.

## Glossary of terms (continued)

**Efficacy:** The capacity of a service to deliver a desired result or outcome.

**Efficiency:** The production of an agreed output related to the consumption of resources (time, cost, labour).

**Evidence-based:** Approaches that are based on information extracted from literature and recorded experiences.

**Gatekeeper:** An informal community leader or a specifically designated person, such as a primary-care provider, who coordinates patient care and provides referrals to specialists, hospitals, laboratories, and other medical services.

**Help-seeking:** The process of an individual asking for help or support in order to cope with adverse life events or other difficult circumstances.

**Holding environment:** Refers to a therapeutic setting that permits the client to experience safety, and thus enhances therapeutic work.

**Imminent risk:** The point at which suicide is extremely likely in the near future; intervention may be necessary.

**Indicated intervention:** Working with individuals who are showing early signs of risk for health problems, with the aim of preventing a condition from arising.

**Indigenous Australians:** A person who is of Aboriginal or Torres Strait Islander descent; and identifies as an Australian Aboriginal or Torres Strait Islander person; and is accepted as such by the community in which s/he lives or has lived.

**Integrated response:** Interventions that respond to a range of issues using a multi-faceted approach.

**Intervention:** In suicide prevention it refers to any action taken to improve a person's health and wellbeing or to change the course of or treat dysfunctional behaviour.

**Jurisdiction:** Commonwealth, State or Territory.

**Loss:** Loss is produced by an incident which is perceived to be negative by those involved and results in long-term change.

**Medium:** The mode, means or carrier (person or resource) through which information or support is provided.

**Mental disorder:** A recognised, medically diagnosable illness or disorder that results in significant impairment of an individual's thinking and emotional abilities and may require intervention.

**Mental health promotion:** Action to maximise mental health and wellbeing among populations and individuals.

**Multi-faceted:** Having many aspects or facets.

**Multi-disciplinary approach:** Approaches that involve professionals, agencies, organisations, and persons providing coordinated client service that draws on expertise from a range of disciplines.

**Paradigm:** A set of rules and regulations (written or unwritten) that does two things: 1) it establishes or defines boundaries; and 2) it tells you how to behave inside the boundaries in order to be successful. It is a shared set of assumptions about how we perceive the world – a set of tacit assumptions and beliefs within which research goes on.

**Pathways to care:** A model that encompasses the coordination/provision of health promotion, prevention, early intervention, symptom identification, treatment and long-term care.



## Glossary of terms (continued)

**Peer education:** The use of identified and trained peers to provide information aimed at increasing awareness or influencing behaviour change.

**Population-based interventions:** Interventions targeting populations rather than individuals. They include activities targeting the whole population as well as activities targeting population subgroups such as rural or Aboriginal peoples and Torres Strait Islander peoples.

**Post Traumatic Stress Disorder (PTSD):**

A psychological disorder affecting individuals who have experienced or witnessed profoundly traumatic events, such as torture, murder, rape, or wartime combat, characterised by recurrent flashbacks of the traumatic event, nightmares, irritability, anxiety, fatigue, forgetfulness, and social withdrawal.

**Postvention:** Interventions to support and assist the bereaved after a suicide has occurred.

**Predisposing factors:** Non-modifiable factors that may increase a person's susceptibility to suicide-related behaviours, such as genetic and neurobiological factors, gender, personality, culture, socio-economic background and level of isolation.

**Prevention:** Preventing conditions of ill health from arising.

**Primary care:** The care system that forms the first point of contact for those in the community seeking assistance. It includes community-based care from generalist services such as general practitioners, Aboriginal medical services, school counsellors and community-based health and welfare services.

**Protective factors:** Capacities, qualities, environmental and personal resources that drive individuals towards growth, stability, and health.

**Proximal factors:** see risk factors.

**Receptivity of client:** The capacity and willingness of the person to receive and absorb information and support.

**Recovery:** Recovery is the process of a gradual restoration of a satisfying, hopeful and meaningful way of life.

**Refugee:** A person who, through a well-founded fear of being persecuted (for reasons of race, religion, nationality or membership of a social or political group), is displaced from their country of origin and is unable or unwilling to return. Sometimes referred to as a 'displaced person' or 'forced migrant'.

**Resilience:** Capacities within a person that promote positive outcomes, such as mental health and wellbeing, and provide protection from factors that might otherwise place that person at risk of suicide. Resilience is often described as 'the ability to bounce back from adversity'. Factors that contribute to resilience include personal coping skills and strategies for dealing with adversity, such as problem-solving, cognitive and emotional skills, communication skills and help-seeking behaviours.

**Risk factors:** Factors such as biological, psychological, social and cultural agents that are thought to increase the likelihood of suicide/suicide ideation. Risk factors can be defined as either distal (internal factors, such as genetic or neurochemical factors) or proximal (external factors, such as life events or the availability of lethal means - factors which can 'trigger' a suicide or suicide-related behaviours).

**Selective intervention:** Activities that target population or community groups at higher risk for a particular problem, rather than the whole population or particular individuals. This might include working with the families of those bereaved through suicide or, for instance children who have been traumatised or abused over time.

**Self-injury:** Deliberate damage of body tissue, often in response to psychosocial distress, without the intent to die. Sometimes called self-inflicted injuries or self-harm.

**Statistical division:** A Statistical Division (SD) is an Australian Standard Geographical Classification (ASGC) defined area which represents a large, general purpose, regional type geographic area. SDs represent relatively homogeneous regions characterised by identifiable social and economic links between the inhabitants and between the economic units within the region, under the unifying influence of one or more major towns or cities. They consist of one or more Statistical Subdivisions (SSDs) and cover, in aggregate, the whole of Australia without gaps or overlaps. They do not cross State or Territory boundaries and are the largest statistical building blocks of States and Territories.

**Suicide:** The act of purposely ending one's life.

**Suicide-related behaviours:** Includes the spectrum of activities related to suicide and self-harm including suicidal thinking, self-harming behaviours not aimed at causing death, and suicide attempts. Some writers also include deliberate recklessness and risk-taking behaviours as suicide-related behaviours.



## Glossary of terms (continued)

**Suicidal ideation:** Thoughts about attempting or completing suicide.

**Suicide prevention:** Actions or initiatives to reduce the risk of suicide among populations or specific target groups.

**Suicidology:** Scientific study of suicide.

**Support:** To assist with the burden or the weight of an issue, problem or adversity. Support can take many forms, including information provision, services and face-to-face counselling.

**Sustainability:** The ability of a program to function over the long-term through adequate funding and the appropriate use of resources.

**Timeliness of service:** Provision of information, service or support at the most appropriate or opportune moment for it to be received, understood and meaningfully applied.

**Tipping point:** The point at which a person's risk of suicide increases due to the occurrence of some precipitating event, such as a negative life event or an increase in symptoms of a mental disorder.

**Universal intervention:** Interventions that target the whole of a population or populations. In suicide prevention, these include activities to reduce access to means of suicide, to reduce media coverage of suicide, or to create stronger and more supportive families, schools and communities.

**Warning signs:** Behaviours that indicate a possible increased risk of suicide, such as giving away possessions, talking about suicide or the withdrawal from family, friends and normal activities.

*NOTE: These terms are from a variety of sources, some are common usage, others are cited in the body of the report.*

<sup>1</sup> McLeod, J. (2003) *An Introduction to Counselling*. 3rd Ed., pp.157, Maidenhead: Open University Press.

<sup>2</sup> Seifer, R., Sameroff, A.J., Baldwin, C.P. & Baldwin, A. (1992). *Child and family factors that ameliorate risk between 4 and 13 years of age*, *Journal of the American Academy of Child and Adolescent Psychiatry*, 31(5), 893-903.

Other main references:

Edgerton, J E. (1994). *American Psychiatric Glossary*, 7th Edition. Washington, DC: American Psychiatric Press.

Raphael B. (1984). *The Anatomy of Bereavement: A handbook for the Caring Professions*. Hutchinson: London.

Moore, B. (ed) (2004). *The Australian Oxford Dictionary*. Oxford University Press: Melbourne.

# Endnotes

- 1 Commonwealth of Australia (2000). *Living Is For Everyone: A Framework for prevention of suicide and self-harm in Australia*. Commonwealth of Australia.
- 2 Zalta, E.N. (Ed.) (2004). *Stanford Encyclopedia of Philosophy*, <http://www.plato.stanford.edu/>.
- 3 Shneidman, E. (1996), *The Suicidal Mind*. New York: Oxford University Press, p. 4.
- 4 Appalsamy, P. (2006). Understanding suicide-related behaviours, *Grocott's Mail Digital Edition*, 9 June.
- 5 O'Carroll, P.W., Berman, A.L., Maris, R.W., Moscicki, E.K., Tanney, B.L. & Silverman, M.M. (1996). *Beyond the tower of Babel: A nomenclature for suicidology*, *Suicide and Life-Threatening Behavior*, vol. 26, no. 3, pp. 237-252.
- 6 Baechler, J. (1979). *Suicides*, trans. B. Cooper. New York: Basic Books.
- 7 Pianalto, M.C. (2004). *Suicide and the Self*, MPhil thesis, University of Arkansas.
- 8 Barry, M.M. & Jenkins, R. (Eds) (2006). *Implementing Mental Health Promotion*. London: Elsevier Health Sciences.
- 9 Rickwood, D. (2005). *Pathways of Recovery: 4A's Framework for Preventing further Episodes of Mental Illness*. University of Canberra, Canberra.
- 10 Commonwealth of Australia (2006). National Activities in Suicide Bereavement Project. Department of Health and Ageing, Canberra.
- 11 Prinstein, M.J., Boergers, J., Spirito, A., Little, T.D. & Grapentine, W.L. (2000). Peer functioning, family dysfunction, and psychological symptoms in a risk factors model for adolescent inpatients' suicidal ideation severity. *Journal of Clinical Child Psychology*, vol. 29, no. 3, pp. 392-405.
- 12 Jackson, H. & Nuttall, R.L. (2001). Risk for preadolescent suicide-related behaviours: An ecological model. *Child and Adolescent Social Work Journal*, vol. 18, no. 3, pp. 189-203.
- 13 Gutierrez, P.M., Rodriguez, P.J. & Garcia, P. (2001). Suicide risk factors for young adults: testing a model across ethnicities. *Death Studies*, vol. 25, no. 4, pp. 319-340.
- 14 Qin, P., Agerbo, E. & Mortensen, P.B. (2002). Suicide risk in relation to family history of completed suicide and psychiatric disorders: a nested case-control study based on longitudinal registers. *The Lancet*, vol. 360, pp. 1126-1130.
- 15 Runeson, B. & Asberg, M. (2003). Family history of suicide among suicide victims. *American Journal of Psychiatry*, vol. 160, no. 8, pp. 1525-1526.
- 16 Duberstein, P.R., Conwell, Y., Conner, K.R., Eberly, S. & Caine, E.D. (2004). Suicide at 50 years of age and older: perceived physical illness, family discord and financial strain. *Psychological Medicine*, vol. 34, pp. 137-146.
- 17 Tarrier, N., Barrowclough, C., Andrews, B. & Gregg, L. (2004). Risk of non-fatal suicide ideation and behaviour in recent onset schizophrenia - the influence of clinical, social, self-esteem and demographic factors. *Social Psychiatry and Psychiatric Epidemiology*, vol. 39, no. 11, pp. 927-937.
- 18 Yoder, K.A. & Hoyt, D.R. (2005). Family economic pressure and adolescent suicidal ideation: application of the family stress model. *Suicide and Life Threatening Behaviour*, vol. 35, no. 3, pp. 251-264.
- 19 Verona, E., Hicks, B.M. & Patrick, C.J. (2005). Psychopathy and suicidality in female offenders: mediating influences of personality and abuse. *Journal of Consulting and Clinical Psychology*, vol. 73, no. 6, pp. 1065-1073.

## Endnotes (continued)

- 20 Smith, J.M., Alloy, L.B. & Abramson, L.Y. (2006). Cognitive vulnerability to depression, rumination, hopelessness, and suicidal ideation: multiple pathways to self-injurious thinking. *Suicide and Life Threatening Behaviour*, vol. 36, no. 4, pp. 443-454.
- 21 Agerbo, E., Sterne, J.A.C. & Gunnell, D.J. (2007). Combining individual and ecological data to determine compositional and contextual socio-economic risk factors for suicide. *Social Science & Medicine*, vol. 64, pp. 451-461.
- 22 World Health Organisation (2002). Suicide Prevention in Europe. *The WHO European monitoring survey on national suicide prevention programmes and strategies*. Copenhagen: WHO Regional Office for Europe.
- 23 Knox, K.L., Litts, D.A., Talcott, G.W., Feig, J.C. & Caine, E.D. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. *British Medical Journal*, vol. 327, p. 1376.
- 24 Qin, P., Agerbo, E. & Mortensen, P.B. (2002). Suicide risk in relation to socioeconomic, demographic, psychiatric, and familial factors: A national register-based study of all suicides in Denmark, 1981-1997. *The American Journal of Psychiatry*, vol. 160, no. 4, pp. 765-772.
- 25 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Vamrik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide prevention strategies. A systematic review. *Journal of the American Medical Association*, vol. 294, no. 16, pp. 2064-2074.
- 26 Beautrais, A.L. Collings, S.C.D., Ehrhardt, P, et al. (2005). *Suicide Prevention: A review of evidence of risk and protective factors, and points of effective intervention*. Wellington: Ministry of Health.
- 27 Robinson, J., McGorry, P., Harris, M.G., Pirkis, J., Burgess, P., Hickie, I. & Headey, A. (2006). Australia's National Suicide Prevention Strategy: the next chapter. *Australian Health Review*, vol. 30, no. 3, pp. 271-276.
- 28 Beautrais, A.L. (2006). Suicide Prevention Strategies 2006. *Australian e-Journal for the Advancement of Mental Health*, vol. 5, no. 1, pp. 1-6.
- 29 Rehkopf, D.H. & Buka, S.L. (2006). The association between suicide and socio-economic characteristics of geographical areas: a systematic review. *Psychological Medicine*, vol. 36, pp. 145-157.
- 30 Page, A., Morrell, S., Taylor, R., Carter, G. & Dudley, M. (2006). Divergent trends in suicide by socio-economic status in Australia. *Social Psychiatry and Psychiatric Epidemiology*, vol. 41, no. 11, pp. 911-917.
- 31 Bridge, S. (2006). Suicide prevention. Targeting the patient at risk. *Australian Family Physician*, vol. 35, no. 5, pp. 335-338.
- 32 Brent, D.A. & Mann, J.J. (2006). Familial pathways to suicidal behaviour - Understanding and preventing suicide among adolescents. *New England Journal of Medicine*, vol. 355, no. 26, pp. 2719-2721.
- 33 Beautrais, A., Fergusson, D., Coggan, C., Collings, C., Doughty, D., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: a review of the evidence. *The New Zealand Medical Journal*, vol. 120, no. 1251, pp. 1-13.

## Endnotes (continued)

- 34 American Foundation for Suicide Prevention (2007). <http://www.afsp.org/>.
- 35 See for example Smith, E. J. (2006). The strength-based counselling model. *The Counseling Psychologist*, vol. 34, no. 1, pp. 13-79.
- 36 Adapted from Kurt Lewin as quoted in the Outdoor Education Research and Evaluation Center, Wilderdom ([www.wilderdom.com/research.php](http://www.wilderdom.com/research.php))
- 37 Livingstone, G.; (2005); *Too Soon Old, Too Late Smart*; Hachette Australia, Sydney, p 51.
- 38 Bonanno, G.; (2004); Loss, Trauma, and Human Resilience: Have we underestimated the human capacity to thrive after extremely aversive events?; *American Psychologist*, January, Vol 59, No. 1, pp 20-28.
- 39 Glantz, M. & Johnson, J. (1999). *Resilience and Development*. New York: Plenum.
- 40 Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*, vol. 50, pp. 370-396.
- 41 Kumpfer, K.L. (1999). Factors and processes contributing to resilience: The resilience framework. In Glantz, M.D. & Johnson, J.L. (1999). *Resilience and Development: Positive Life Adaptations*. New York: Kluwer Academic/Plenum Publishers, pp. 179-224.
- 42 Rudd, M.D. (2000). The suicidal mode: A cognitive-behavioural model of suicidality. *Suicide and Life-Threatening Behaviour*, vol. 31, no. 1, pp. 18-33.
- 43 Beautrais, A.L. (1998). *Risk Factors for Suicide and Attempted Suicide Amongst Young People*. A literature review prepared for the National Health and Medical Research Council.
- 45 Glantz, M. & Johnson, J. (1999). *Resilience and Development*. New York: Plenum, p. 7.
- 46 Burns, T.E. (1994). *From Risk to Resilience: A Journey with Heart for Our Children, Our Future*. Dallas, Texas: Marco Polo Publishers.
- 47 Kaplan, H. (1999). Towards an understanding of resilience. In *Resilience and Development* (M. Glantz & J. Johnson, Eds). New York: Plenum, p. 17.
- 48 Kaplan, H. (1999). Towards an understanding of resilience. In *Resilience and Development* (M. Glantz & J. Johnson, Eds). New York: Plenum, p. 19.
- 49 Taylor, R., Page, A., Morrell, S., Harrison, J. & Carter, G. (2005). Mental health and socio-economic variations in Australian suicide. *Social Science & Medicine*, vol. 61, no. 7, pp. 1551-1559.
- 50 World Health Organization (2005). *WHO Resource Book on Mental Health: Human rights and legislation*. Geneva: World Health Organisation.
- 51 American Psychological Association (2000). *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition TR. Washington, DC: American Psychological Association.
- 52 Bertolote, J.M., Fleischmann, A., De Leo, D. & Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. *Crisis*, vol. 25, no. 4, pp. 147-155.
- 53 Lester, D. (2006). Can suicide be a good death? *Death Studies*, vol. 30, no. 6, pp. 511-527.
- 54 Corrigan, P.W. (2007). How clinical diagnosis might exacerbate the stigma of mental illness. *Social Work*, vol. 52, no. 1, pp. 31-39.
- 55 Aisbett, D.L., Boyd, C.P. Francis, K.J., Newnham, K. & Newnham, K. (2007). Understanding barriers to mental health service utilization for adolescents in rural Australia. *Rural and Remote Health*, vol. 7, no. 1, p. 624.
- 56 Caspi, A., Sugden, K., Moffitt, T.E., Taylor, A., Craig, I.W., Harrington, H., McClay, J., Mill, J., Martin, J., Braithwaite, A. & Poulton, R. (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science*, vol. 301, pp. 386-389.
- 57 Rutter, M., Moffitt, T.E. & Caspi, A. (2006). Gene-environment interplay and psychopathology: multiple varieties but real effects. *Journal of Child Psychology and Psychiatry*, vol. 47, no. 3/4, pp. 226-261.
- 58 Bertolote, J.M., Fleischmann, A., De Leo, D. & Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. *Crisis*, vol. 25, no. 4, pp. 147-155.
- 59 Kan, C.K., Ho, T.P., Dong, J.Y. & Dunn, E.L. (2007). Risk factors for suicide in the immediate post-discharge period. *Social Psychiatry and Psychiatric Epidemiology*, vol. 42, no. 3, pp. 208-214.
- 60 Pirkola, S., Sohlman, B., Heila, H. & Wahlbeck, K. (2007). Reductions in post-discharge suicide after deinstitutionalization and decentralization: a nationwide register study in Finland. *Psychiatric Services*, vol. 58, no. 2, pp. 221-226.

## Endnotes (continued)

- 61 Bertolote, J.M., Fleischmann, A., De Leo, D. & Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. *Crisis*, vol. 25, no. 4, pp. 147-155.
- 62 Hall, W.D., Mant, A., Mitchell, P.B., Rendle, V.A., Hickie, I.B. & McManus, P. (2003). Association between antidepressant prescribing and suicide in Australia, 1991-2000: trend analysis. *British Medical Journal*, vol. 326, p. 1008.
- 63 Bridge, J.A., Iyengar, S., Salary, C.B., Barbe, R.P., Birmaher, B., Pincus, H.A., Ren, L. & Brent, D.A. (2007). Clinical response and risk for reported suicidal ideation and suicide attempts in paediatric antidepressant treatment: a meta-analysis of randomized controlled trials. *Journal of the American Medical Association*, vol. 297, no. 15, pp. 1683-1696.
- 64 Rubino, A., Roskell, N., Tennis, P., Mines, D., Weich, S. & Andrews, E. (2007). Risk of suicide during treatment with venlafaxine, citalopram, fluoxetine, and dothiepin: retrospective cohort study. *British Medical Journal*, vol. 334, p. 242.
- 65 Tiihonen, J., Lonnqvist, J., Wahlbeck, K., Klaukka, T., Tanskanen, A. & Haukka, J. (2006). Antidepressants and the risk of suicide, attempted suicide, and overall mortality in a nationwide cohort. *Archives of General Psychiatry*, vol. 63, no. 12, pp. 1358-1367.
- 66 Goldney, R.D. (2006). Suicide and antidepressants: what is the evidence? *Australian and New Zealand Journal of Psychiatry*, vol. 40, pp. 381-385.
- 67 Goldney, R.D. (2006). Suicide in Australia: some good news. *Medical Journal of Australia*, vol. 185, no. 6, p. 304.
- 68 Goldney, R.D. (2005). Suicide prevention. A pragmatic review of recent studies. *Crisis*, vol. 26, no. 3, pp. 128-140.
- 69 Hall, W.D. & Lucke, J. (2006). How have the selective serotonin reuptake inhibitor antidepressants affected suicide mortality? *Australian and New Zealand Journal of Psychiatry*, vol. 40, pp. 941-950.
- 70 Bridge, J.A., Iyengar, S., Salary, C.B., Barbe, R.P., Birmaher, B., Pincus, H.A., Ren, L. & Brent, D.A. (2007). Clinical response and risk for reported suicidal ideation and suicide attempts in paediatric antidepressant treatment: a meta-analysis of randomized controlled trials. *Journal of the American Medical Association*, vol. 297, no. 15, pp. 1683-1696.
- 71 Bertolote, J.M., Fleischmann, A., De Leo, D. & Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. *Crisis*, vol. 25, no. 4, pp. 147-155.
- 72 Kolves, K., Varnik, A., Schneider, B., Fritze, J., Allik, J. (2006). Recent life events and suicide: A case-control study in Tallinn and Frankfurt, *Social Science and Medicine*, vol. 62, pp. 2887-2896.
- 73 Paykel, E.S., Prusoff, B.A. & Myers, J.K. (1975). Suicide attempts and recent life events. A controlled comparison, *Archives of General Psychiatry*, vol. 32, no. 3, pp. 327-333.
- 74 Beautrais, A.L., Joyce, P.R. & Mulder, R.T. (1997). Precipitating factors and life events in serious suicide attempts among youths aged 13 through 24 years, *Journal of the American Academy of Child and Adolescent Psychiatry*, vol. 36, no. 11, pp. 1543-1551.
- 75 Cooper, J., Appleby, L. & Amos, T. (2002). Life events preceding suicide by young people, *Social Psychiatry and Psychiatric Epidemiology*, vol. 37, pp. 271-275.
- 76 The International Association for Suicide Prevention IASP *Guidelines for suicide prevention*, [www.med.uio.no/iasp/english/guidelines.html](http://www.med.uio.no/iasp/english/guidelines.html).
- 77 Commission on Chronic Illness (1957) *Chronic Illness in the United States*, Vol 1; Published for the Commonwealth Fund, Cambridge, Massachusetts; Harvard University Press.
- 78 Gordon, R. S. Jr (1983). An operational classification of disease prevention; *Public Health Reports*; 98 (2): 107-109.
- 79 Mrazek, P.J., Haggerty, R.J. (1994) *Reducing the Risks for Mental Health Disorders*; Institute of Medicine, Washington, DC: National Academy Press, pp 19-3.
- 80 Raphael, B.; (2000); *A population health model for the provision of mental health care*; National Mental Health Strategy, Commonwealth of Australia; Canberra.
- 81 Commonwealth of Australia; (2005); *A Framework for Effective Community-Based Suicide Prevention* (Draft for Consultation); Australian Government's Community Life Project.
- 82 Bonner, R.L. & Rich, A.R. (1987). Toward a predictive model of suicidal ideation and behaviour: some preliminary data in college students. *Suicide and Life Threatening Behaviour*, vol. 17, no. 1, pp. 50-63.

## Endnotes (continued)

- 83 Rudd, M. (2000). The suicidal mode: a cognitive-behavioural model of suicidality. *Suicide and Life-Threatening Behavior*, vol. 30, no. 1, pp. 18-33.
- 84 Jackson, H. & Nuttall, R.L. (2001). Risk for preadolescent suicide-related behaviours: An ecological model. *Child and Adolescent Social Work Journal*, vol. 18, no. 3, pp. 189-203.
- 85 Associate Minister of Health (2006). *The New Zealand Suicide Prevention Strategy 2006-2016*. Wellington: Ministry of Health.
- 86 Davidow, W.H.; Malone, M.S.; (1992); *The Virtual Corporation: Structuring and revitalising the corporation for the 21st century*; Harper Business; New York.
- 87 De Rose, L.; (1994); *The Value Network; Integrating the five critical processes that create customer satisfaction*; American Management Association, New York.
- 88 Hedberg, B.; Dahlgren, G.; Hansonn, J.; Olve, N.; (1994); *Virtual Organisations and beyond: Discover Imaginary Systems*; John Wiley and Sons, New York.
- 89 Van Schager, J.; (1987); *About the Management of Quality*; Australian Organisation for Quality Control (WA Division).
- 90 Waring, A.; Glendon, A.; (1998); *Managing Risk; Critical issues for survival and success into the 21st century*; International Thomson Business Press, London.
- 91 Wiener, N.; (1965); *Cybernetics; Controlled communication in the animal and the machine*; Second Addition, MIT Press, USA.
- 92 Checkland, P.; 1988; *Systems Thinking, Systems Practice*; John Wiley and Sons, Chichester.
- 93 Australian Council for Safety and Quality in Health Care; (2004); *Maximising National Effectiveness to Reduce Harm and Improve Care*; Fifth report to the Australian Health Ministers' Conference, 29 July.
- 94 Australian Council for Safety and Quality in Health Care; (2005); *Clinical Handover and Patient Safety: Literature Review Report*; March.
- 95 National Patient Safety Agency; (2004); *Seven Steps to patient safety: An overview guide for NHS staff*; February.
- 96 National Patient Safety Agency; (2004); *Step 5: Seven Steps to patient safety: Involve and communicate with patients and the public*; February.
- 97 Australian Council for Safety and Quality in Health Care; (2004); *Maximising National Effectiveness to Reduce Harm and Improve Care*; Fifth report to the Australian Health Ministers' Conference, 29 July.
- 98 Victorian Quality Council; (2006); *Clinical Handover: A challenge for patient Safety*; The Victorian Quality Council: Safety and Quality in Health Newsletter; February.
- 99 National Patient Safety Agency; (2004); *Safe handover: safe patients: Guidance on clinical handover for clinicians and managers*; British Medical Association, Junior Doctors Committee.
- 100 This analysis and research summary has been informed by research undertaken by the Australian Institute for Suicide Research and Prevention (AISRAP) and WHO Collaborating Centre for Research and Training in Suicide Prevention, Mt Gravatt Campus, Griffith University, June 2006.
- 101 Goldacre, M., Seagroatt, V., & Hawton, K. ;(1993). *Suicide after discharge from psychiatric inpatient care*. *The Lancet*, 342, pp 283-286
- 102 Hoyer, E. H; Olesen, A. V; Mortensen, P. B.; ( 2004); Suicide risk in patients hospitalised because of an affective disorder: A follow-up study, 1973-1993; *Journal of Affective Disorders*. Vol 78(3) Mar, pp 209-217.
- 103 Appleby, L.; Dennehy, J.A.; Thomas, C.S.; Fragher, B.E.; Lewis, G.;(1999); Aftercare and clinical characteristics of people with mental illness who commit suicide; A case-control study. *The Lancet*, London: vol 353 April 24, issue 9162; pp 1397-1340.
- 104 Qin, P.; Nordentoft, M.; (2005) Suicide Risk in Relation to Psychiatric Hospitalization. *Archives of General Psychiatry*. Vol 62(4) Apr, pp 427-432.
- 105 Goldacre, M., Seagroatt, V., & Hawton, K.;(1993). Suicide after discharge from psychiatric inpatient care. *The Lancet*, 342, pp 283-286.
- 106 Geddes, J.R.;Juszczak, E.; O'Brien, F.;Kendrick, S;. Suicide in the 12 months after discharge from psychiatric inpatient care, Scotland 1968-92 *Journal of Epidemiology & Community Health*; 51: 430-434.
- 107 Beaugeois, M., Swendsen, J., Young, F., Amador, X., Pini, S., Cassano, G.B., Lindenmayer, J., Hsu, C., Alphas, L., Meltzer, H.Y. & the InterSePT Study Group (2004). Awareness of disorder and suicide risk in the treatment of schizophrenia: Results of the International Suicide Prevention Trial. *The American Journal of Psychiatry*, vol. 161, pp. 1494-1496.



## Endnotes (continued)

- 108 Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.L., Korslund, K.E., Tutek, D.A., Reynolds, S.K., Lindenboim, N. (2007). Two-year randomized controlled trial and follow-up of dialectical behaviour therapy by experts for suicide-related behaviours and borderline personality disorder. *Archives of General Psychiatry*, vol. 63, pp. 757-766.
- 109 Glick, I.D., Zaninelli, R., Hsu, C., Young, F.K., Weiss, L., Gunay, I. & Kumar, V. (2004). Patterns of concomitant psychotropic medication use during a 2-year study comparing clozapine and olanzapine for the prevention of suicide-related behaviours. *Journal of Clinical Psychiatry*, vol. 65, no. 5, pp. 679-685.
- 110 Mental Health Council of Australia (2006). *Time for service: solving Australia's mental health crisis*; Mental Health Council of Australia, Canberra.
- 111 Australian Bureau of Statistics (2007). *Suicides*. 2005. (Catalogue No. 3309.0). Canberra: Australian Bureau of Statistics.
- 112 Measey, M., Li, S.Q., Parker, R. & Wang, Z. (2006). Suicide in the Northern Territory, 1981-2002. *Medical Journal of Australia*, vol. 185, no. 6, pp. 315-319.
- 113 Harrison, J. & Moller, J. (1994). *Australian Injury Prevention Bulletin, Issue 7: Injury Mortality Amongst Aboriginal Australia*. National Injury Surveillance Unit, Adelaide.
- 114 Cantor, C., Neulinger, K., Roth, J., Spinks, D. (1998). *The epidemiology of suicide and attempted suicide among young Australians*. A literature review prepared for National Health and Medical Research Council, Canberra.
- 115 Fremantle, J. (2005). *From data to detail - pathways to policy: Closing the know-do gap*. Presentation to the Australian Research Alliance for Children and Youth (ARACY) National Conference, Sydney, August.
- 116 Hunter, E., Reser, J. Baird, M. & Reser, P. (2001). *An analysis of suicide in indigenous communities of North Queensland: The historical, cultural and symbolic landscape*. A report to the Commonwealth Department of Health and Ageing, Canberra.
- 117 Procter, N.G. (2005). Parasuicide, self-harm and suicide in Aboriginal people in rural Australia: A review of the literature with implications for mental health nursing practice. *International Journal of Nursing Practice*, vol. 11, pp. 237-241.
- 118 Swan, P. & Raphael, B. (1995). *Ways Forward*. Australian Government Publishing Service, Canberra.
- 119 Procter, N.G. (2005). Parasuicide, self-harm and suicide in Aboriginal people in rural Australia: A review of the literature with implications for mental health nursing practice. *International Journal of Nursing Practice*, vol. 11, pp. 237-241.
- 120 Tatz, C. (1999). *Aboriginal Suicide is Different - Aboriginal Youth Suicide in New South Wales, the Australian Capital Territory and New Zealand: Towards a Model of Explanation and Alleviation*. A report to the Criminology Research Council on CRC Project 25/96-7.
- 121 Vicary, D. & Westerman, T. (2004). 'That's just the way he is': Some implications of Aboriginal mental health beliefs. *Australian e-Journal for the Advancement of Mental Health*, vol. 3, no. 3.
- 122 Australian Bureau of Statistics (2007). *Suicides*. 2005. Australian Bureau of Statistics, Canberra.
- 123 Cantor, C.H. & Slater, P.J. (1995). Marital breakdown, parenthood, and suicide. *Journal of Family Studies*, vol. 1, no. 2, pp. 91-102.
- 124 Goldney, R.D., Fisher, L.J., Wilson, D.H. & Cheok, F. (2002). Mental health literacy of those with major depression and suicidal ideation: an impediment to help seeking. *Suicide and Life Threatening Behaviour*, vol. 32, no. 4, pp. 394-403.
- 125 Howerton, A., Byng, R., Campbell, J., Hess, D., Owens, C. & Aitken, P. (2007). Understanding help seeking behaviour among male offenders: qualitative interview study. *British Medical Journal*, vol. 334, pp. 1-7.
- 126 Emslie, C., Ridge, D., Ziebland, S. & Hunt, K. (2006). Men's accounts of depression: Reconstructing or resisting hegemonic masculinity? *Social Science & Medicine*, vol. 62, pp. 2246-2257.
- 127 Schaub, M. & Williams, C. (2007). Examining the relations between masculine gender role conflict and men's expectations about counselling. *Psychology of Men & Masculinity*, vol. 8, no. 1, pp. 40-52.
- 128 Emslie, C., Ridge, D., Ziebland, S. & Hunt, K. (2006). Men's accounts of depression: Reconstructing or resisting hegemonic masculinity? *Social Science & Medicine*, vol. 62, pp. 2246-2257.

## Endnotes (continued)

- 129 Mishara, B.L., Houle, J. & Lavoie, B. (2005). Comparison of the effects of four suicide prevention programs for family and friends of high-risk suicidal men who do not seek help themselves. *Suicide and Life-Threatening Behavior*, vol. 35, no. 3, pp. 329-342.
- 130 Brownhill, S., Wilhelm, K., Elovson, G. & Waterhouse, M. (2003). 'For men only'. A mental health prompt list in primary care. *Australian Family Physician*, vol. 32, no. 6, pp. 443-450.
- 131 Brownhill, S., Wilhelm, K., Barclay, L. & Parker, G. (2002). Detecting depression in men: A matter of guesswork. *International Journal of Men's Health*, vol. 1, no. 3, pp. 259-280.
- 132 Page, A., Tobias, M., Glover, J., Wright, C., Hetzel, D. & Fisher, E. (2006). *Australian and New Zealand Atlas of Avoidable Mortality*. Adelaide: PHIDU, University of Adelaide.
- 133 Page, A., Tobias, M., Glover, J., Wright, C., Hetzel, D. & Fisher, E. (2006). *Australian and New Zealand Atlas of Avoidable Mortality*. Adelaide: PHIDU, University of Adelaide.
- 134 Aisbett, D.L., Boyd, C.P. Francis, K.J., Newnham, K. & Newnham, K. (2007). Understanding barriers to mental health service utilization for adolescents in rural Australia. *Rural and Remote Health*, vol. 7, no. 1, p. 624.
- 135 Henley, G., Kreisfeld, R. & Harrison, J.E. (2007). *Injury deaths, Australia 2003-04*. Australian Institute of Health and Welfare, Canberra.
- 136 Silverman, M. M., Berman, A.L., Sanddal, N.D., O'Carroll, P.W., Joiner, T.E. (2007) Rebuilding the Tower of Babel: A Revised Nomenclature for the Study of Suicide and Suicide-related Behaviours. *Suicide and Life Threatening Behaviour*, 37(3), June 2007, The American Association of Suicidology.
- 137 Steenkamp, M. & Harrison, J. (2000). *Suicide and hospitalised self-harm in Australia*. Canberra: Australian Institute of Health and Welfare.
- 138 De Leo, D. & Heller, T. (2004). Who are the kids who self-harm? An Australian self-report school survey. *Medical Journal of Australia*, vol. 181, pp. 140-144.
- 139 Favazza, A.R. (1998). The coming of age of self-mutilation. *Journal of Nervous and Mental Disease*, vol. 186, no. 5, pp. 259-268.
- 140 Stanley, B., Gameroff, M.J., Michalsen, V., & Mann, J.J. (2001). Are suicide attempters who self-mutilate a unique populations? *The American Journal of Psychiatry*, vol. 158, no. 3, pp. 427.
- 141 Ryan, J., Rushdy, A., Perez-Avila, C., & Allison, R. (1996). Suicide rate following attendance at an accident and emergency department with deliberate self-harm. *Emergency Medical Journal*, vol. 13, no. 2, pp. 101-104.
- 142 Zahl, D., Hawton, K. (2004) Repetition of deliberate self-harm and subsequent suicide risk: long-term follow-up study in 11,583 patients. *British Journal of Psychiatry*, pp. 70-75.
- 143 Hawton, K., James, A. (2005) Suicide and deliberate self-harm in young people. *British Medical Journal, BMJ*, vol. 330, pp. 891-894.
- 144 Muehlenkamp, J.J. & Gutierrez, P.M. (2004) An investigation of differences between self-injurious behaviour and suicide attempts in a sample of adolescents. *Suicide and Life-Threatening Behaviour*, vol. 34, no. 1, pp. 12-23.
- 145 Brown, G.K., Have, T.T., Henriques, G.R., Xie, S.X., Hollander, J.E. & Beck, A.T. (2005). Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial. *Journal of the American Medical Association*, vol. 294, no. 5, pp. 563-570.
- 146 Samuelsson, M. & Asberg, M. (2002). Training program in suicide prevention for psychiatric nursing personnel enhance attitudes to attempted suicide patients. *International Journal of Nursing Studies*, vol. 39, no. 1, pp. 115-121.
- 147 De Leo, D., Bille-Brahe, U., Kerkhof, A.D.J.F. & Schmidke, A. (eds). *Suicide-related behaviours. Theories and research findings* (p.34). Göttingen: Hogrefe & Huber.
- 148 Burvill, P.W. Migrant suicide rates in Australia and country of birth. *Psychological Medicine*, 1998, 28(1), p. 201-208.
- 149 Hunt, I.M., Robinson, J., Bickley, H., Meehan, J., Parsons, R., McCann, K., Flynn, S., Burns, J., Shaw, J., Kapur, N. & Appleby, L. (2003). Suicides in ethnic minorities within 12 months of contact with mental health services. National clinical survey. *British Journal of Psychiatry*, vol. 183, pp. 155-160.
- 150 Sack, W.H. and Him, Twelve-Year Follow-up Study of Khmer Youths Who Suffered Massive War Trauma as Children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1999, 38(9): p. 1173.



## Endnotes (continued)

- 151 Hodes, M. and J. Tolmac, Severely Impaired Young Refugees. *Clinical Child Psychology and Psychiatry* (2005), 10(2):p. 251-261.
- 152 Hodes, M., Editorial: Children of War. *Clinical Child Psychology and Psychiatry* (2005), 10(2):p. 131-176.
- 153 Steel, et. al. Impact of immigration detention and temporary protection on the mental health of refugees. *British Journal of Psychiatry* (2006) 188(1), p. 58-64.
- 154 Aubert, P. et. al. Cultural traits and immigration: Hostility and suicidality in Chinese Canadian students. *Transcultural Psychiatry* (2004), 41(4): p. 514-532.
- 155 Bengi-Arslan, L., Verhulst, F.C. & Crignen, A.M. (2002). Prevalence and determinants of minor psychiatric disorder in Turkish immigrants living in the Netherlands. *Social Psychiatry and Psychiatric Epidemiology*, vol. 37, no. 3, pp. 118-124.
- 156 Bhugra, D. Migration and mental health. *Acta Psychiatrica Scandinavica* (2004), 109(4): p. 243-258.
- 157 Fenta, H., Hyman, I., and Nok, S. Determinants of depression among Ethiopian Immigrants and Refugees in Toronto, *Journal of Nervous and Mental Disease* (2004), 192(5): p. 363-372.
- 158 Gordon, R.S. (1983). An operational classification of disease prevention, *Public Health Reports*, vol. 98, pp. 107-109.
- 159 Mrazek, P.J. & Haggerty, R.J. (1994). *Reducing the risk of mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press.
- 160 Silverman, M.M. & Maris, R.W. (1995). The prevention of suicide-related behaviours: An overview, *Suicide and Life-Threatening Behaviour*, vol. 25, pp. 10-21.
- 161 Commonwealth of Australia (2000). *Living Is For Everyone: A Framework for prevention of suicide and self-harm in Australia*. Commonwealth of Australia.
- 162 Commonwealth Department of Health and Aged Care (2000). *Areas for Action, LIFE: A framework for prevention of suicide and self-harm in Australia*, Canberra: Commonwealth Department of Health and Aged Care.
- 163 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Vamik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). *Suicide Prevention Strategies: A Systematic Review*, pp. 2064-2074.
- 164 United Nations (1996). *Prevention of suicide: Guidelines for the formulation and implementation of national strategies*. New York: United Nations.
- 165 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Vamik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). *Suicide Prevention Strategies: A Systematic Review*, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 166 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 167 Lester, D. (1997). The effectiveness of suicide prevention centres: A review. *Suicide and Life-Threatening Behavior*, vol. 27, pp. 304-311.
- 168 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Vamik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). *Suicide Prevention Strategies: A Systematic Review*, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 169 Rutz, W., von Knorring, L. & Walinder, J. (1989). Frequency of suicide on Gotland after systematic postgraduate education of general practitioners. *Acta Psychiatrica Scandinavica*, vol. 80, pp. 83-88.
- 170 Rutz, W., von Knorring, L. & Walinder, J. (1992). Long-term effects of an educational program for general practitioners by the Swedish Committee for Prevention and Treatment of Depression. *Acta Psychiatrica Scandinavica*, vol. 85, pp. 83-88.
- 171 Rutz, W., von Knorring, L. & Walinder, J. (1992). Long-term effects of an educational program for general practitioners by the Swedish Committee for Prevention and Treatment of Depression. *Acta Psychiatrica Scandinavica*, vol. 85, pp. 83-88.

## Endnotes (continued)

- 172 Naismith, S.L., Hickie, I.B., Scott, E.M. & Davenport, T.A. (2001). Effects of mental health training and clinical audit on general practitioners' management of common mental disorders. *Medical Journal of Australia*, vol. 175, pp. S42-S47.
- 173 Pfaff, J.J., Acres, J.G. & McKelvey, R.S. (2001). Training general practitioners to recognise and respond to psychological distress and suicidal ideation in young people. *Medical Journal of Australia*, vol. 174, pp. 222-226.
- 174 Knox, K.L., Litts, D.A., Talcott, G.W., Feig, J.C. & Caine, E.D. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. *British Medical Journal*, vol. 327, no. 7428, p. 1376.
- 175 Stuart, C., Waalen, J.K. & Haelstrom, E. (2003). Many helping hearts: An evaluation of peer gatekeeper training in suicide risk assessment. *Death Studies*, vol. 27, pp. 321-333.
- 176 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide Prevention Strategies: A Systematic Review, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 177 Lester, D. (1997). The effectiveness of suicide prevention centres: A review. *Suicide and Life-Threatening Behavior*, vol. 27, pp. 304-311.
- 178 Chapman, S. (2003). The decline in gun deaths, *NSW Public Health Bulletin*, 14(3), 48-50.
- 179 Chapman, S., Alpers, P., Agho, K., Jones, M. (2006). Australia's 1996 gun law reforms: faster falls in firearm deaths, firearm suicides and a decade without mass shootings, *Injury Prevention*, vol. 12, pp. 365-372.
- 180 Oliver, R.G. & Hetzel, B.S. (1972). Rise and fall of suicide rates in Australia: Relation to sedative availability. *Medical Journal of Australia*, vol. 2, pp. 919-923.
- 181 Gunnell, D & Frankel, S. (1994). Prevention of suicide: Aspirations and evidence. *British Medical Journal*, vol. 308, pp. 1227-1234.
- 182 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 183 Hawton, K., Arensman, E., Townsend, E., Bremner, S., Feldman, E., Goldney, R., Gunnell, D., Hazell, P., van Heeringen, K., House, A., Owens, D., Sakinofsky, I., Traskman-Bendz, L. (1998). Deliberate self-harm: Systematic review of efficacy of psychosocial and pharmacological treatments in preventing repetition. *British Medical Journal*, vol. 317, pp. 441-447.
- 184 Hepp, U., Wittmann, L., Schnyder, U., Konrad, M. (2004). Psychological and psychosocial interventions after attempted suicide: An overview of treatment studies. *Crisis*, vol. 25, no. 3, pp. 108-117.
- 185 Links, P.S., Bergmens, Y. & Cook, M. (2003) Psychotherapeutic interventions to prevent repeated suicide-related behaviours. *Brief Treatment and Crisis Intervention*, vol. 3, pp. 445-464.
- 186 Linehan, M.M. (1993). *Cognitive-behavioural treatment of borderline personality disorder*. New York: Guilford Press.
- 187 Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.L., Korslund, K.E., Tutek, D.A., Reynolds, S.K., Lindenboim, N. (2007). Two-year randomized controlled trial and follow-up of dialectical behaviour therapy by experts for suicide-related behaviours and borderline personality disorder. *Archives of General Psychiatry*, vol. 63, pp. 757-766.
- 188 Müller-Oerlinghausen, B., Felber, Berghöfer, A., Lauterbach, E. & Ahrens, B. (2005). The impact of lithium long-term medication on suicide-related behaviours and mortality of bipolar patients. *Archives of Suicide Research*, vol. 9, no. 3, pp. 307-319.
- 189 Beaugeois, M., Swendsen, J., Young, F., Amador, X., Pini, S., Cassano, G.B., Lindenmayer, J., Hsu, C., Alphas, L., Meltzer, H.Y. & the InterSePT Study Group (2004). Awareness of disorder and suicide risk in the treatment of schizophrenia: Results of the International Suicide Prevention Trial. *The American Journal of Psychiatry*, vol. 161, pp. 1494-1496.

## Endnotes (continued)

- 190 Glick, I.D., Zaninelli, R., Hsu, C., Young, F.K., Weiss, L., Gunay, I. & Kumar, V. (2004). Patterns of concomitant psychotropic medication use during a 2-year study comparing clozapine and olanzapine for the prevention of suicide-related behaviours. *Journal of Clinical Psychiatry*, vol. 65, no. 5, pp. 679-685.
- 191 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide Prevention Strategies: A Systematic Review, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 192 De Leo, D. (2004). Suicide prevention is far more than a psychiatric business. *World Psychiatry*, vol. 3, pp. 155-156.
- 193 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 194 Mishara, B. & Daigle, M. (2001). Helplines and crisis intervention services: Challenges for the future. In *Suicide prevention: Resources for the millennium* (ed. D. Lester), pp. 153-169. Philadelphia: Bruner-Routledge.
- 195 Mishara, B. & Daigle, M. (2001). Helplines and crisis intervention services: Challenges for the future. In *Suicide prevention: Resources for the millennium* (ed. D. Lester), pp. 153-169. Philadelphia: Bruner-Routledge.
- 196 King, R., Nurcombe, B., Bickman, L., Hides, L. & Reid, W. (2003). Telephone counselling for adolescent suicide prevention: changes in suicidality and mental state from beginning to end of a counselling session. *Suicide and Life-Threatening Behaviour*, vol. 33, no. 4, pp. 400-411.
- 197 Lester, D. (1997). The effectiveness of suicide prevention centres: A review. *Suicide and Life-Threatening Behavior*, vol. 27, pp. 304-311.
- 198 Miller, H.L., Coombs, D.W., Leeper, J.D. & Barton, S.N. (1984). An analysis of the effects of suicide prevention facilities on suicide rates in the United States. *American Journal of Public Health*, vol. 74, no. 4, pp. 340-343.
- 199 De Leo, D., Carollo, G. & Dello Buono, M. (1995). Lower suicide rates associated with a Tele-Help/ Tele-Check service for the elderly at home. *American Journal of Psychiatry*, vol. 152, pp. 632-634.
- 200 De Leo, D., Dello Buono, M. & Dwyer, J. (2002b). Suicide among the elderly: the long-term impact of a telephone support and assessment intervention in northern Italy. *British Journal of Psychiatry*, vol. 181, pp. 226-229.
- 201 Pirkis, J. & Blood, R.W. (2001). *Suicide and the media. A critical review*. Canberra: Department of Health and Aged Care.
- 202 Pirkis, J., Burgess, P.M., Francis, C., Blood, R.W. & Jolley, D.J. (2006). The relationship between media reporting of suicide and actual suicide in Australia. *Social Science and Medicine*, vol. 62, no. 11, pp. 2874-2886.
- 203 Commonwealth Department of Health and Aged Care (2006). *Reporting suicide and mental illness. A resource for media professionals*. Canberra: Commonwealth of Australia.
- 204 Etzersdorfer, E. & Sonneck, G. (1998). Preventing suicide by influencing mass-media reporting. The Viennese experience 1980-1996. *Archives of Suicide Research*, vol. 4, pp. 67-74.
- 205 Niederkrotenthaler, T., Sonneck, G. (2007). Assessing the impact of media guidelines for reporting on suicides in Austria: interrupted time series analysis. *Australian and New Zealand Journal of Psychiatry*, 41:5, 419-428.
- 206 Shergold, P. (2005). *Governments and communities in partnership*. Speech delivered at National Conference, Melbourne, 18 May 2005.
- 207 Barrett, G. (2003). *Implementing public sector reform to deliver whole-of-government policy outcomes*. Policy Advice and Implementation Conference, Canberra, June 2003.
- 208 Cited in Klein, R. & Plowden, W. JASP meets JUG: Lessons of the 1975 joint approach to social policy for joined-up government. In *Joined-up Government*. Bogdanor, V. (Ed.). New York: Oxford University Press.
- 209 Shergold, P. (2005). *Governments and communities in partnership*. Speech delivered at National Conference, Melbourne, 18 May 2005.

## Endnotes (continued)

- 210 Commonwealth of Australia (2004). *Connecting Government. Whole of Government Responses to Australia's Priority Challenges*. Canberra: Commonwealth of Australia.
- 211 Social Health Reference Group for National Aboriginal and Torres Strait Islander Health Council and National Mental Health Working Group (2004). *Social and Emotional Wellbeing Framework. A National Strategies Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing 2004-2009*. Canberra: Commonwealth of Australia.
- 212 Commonwealth of Australia (2004). *Connecting Government: Whole of government responses to Australia's priority challenges. Good Practice Guides*. Management Advisory Committee, Australian Public Service Commission, Canberra.
- 213 Barrett, G. (2003). *Implementing public sector reform to deliver whole-of-government policy outcomes*. Policy Advice and Implementation Conference, Canberra, June 2003.
- 214 Blacher, Y. and Adams, D. (2007). Working together for stronger Victorian communities. In *The Collaborative State: How working together can transform public services*. Parker, S. and Gallagher, N. (Eds) London: Demos.
- 215 Commonwealth of Australia (2004). *Connecting Government: Whole of government responses to Australia's priority challenges. Good Practice Guides*. Management Advisory Committee, Australian Public Service Commission, Canberra.
- 216 Parker, S. (2007). Beyond Delivery: a collaborative Whitehall. In *The Collaborative State: How working together can transform public services*. Parker, S. and Gallagher, N. (Eds). London: Demos.
- 217 Department of Prime Minister and Cabinet. *Shared Responsibility Agreements: improving community outcomes*. Australian Government (at) [http://www.connected.gov.au/case\\_studies/sra](http://www.connected.gov.au/case_studies/sra). Accessed 10 May 2007.
- 218 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide Prevention Strategies: A Systematic Review, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 219 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 220 Stuart, C., Waalen, J.K. & Haelstrom, E. (2003). Many helping hearts: An evaluation of peer gatekeeper training in suicide risk assessment. *Death Studies*, vol. 27, pp. 321-333.
- 221 Goldsmith, S.K., Pellmar, T.C., Kleinman, A.M. & Bunney, W.E. (2002). Programs for suicide prevention. In *Reducing suicide: A national imperative* (eds S.K. Goldsmith, T.C. Pellmar, A.M. Kleinman, Bunney, W.E.), pp. 273-328. Washington, DC: National Academic Press.
- 222 De Leo, D. (2004). Suicide prevention is far more than a psychiatric business. *World Psychiatry*, vol. 3, pp. 155-156.
- 223 De Leo, D. (2002). Why are we not getting any closer to preventing suicide? *British Journal of Psychiatry*, vol. 183, pp. 382-383.
- 224 Australian Bureau of Statistics (2007). *Suicides. 2005* (Catalogue No. 3309.0). Canberra: Australian Bureau of Statistics.
- 225 Gunnell, D & Frankel, S. (1994). Prevention of suicide: Aspirations and evidence. *British Medical Journal*, vol. 308, pp. 1227-1234.
- 226 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide Prevention Strategies: A Systematic Review, *Journal of the American Medical Association*, vol. No. 16, pp. 2064-2074.
- 227 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 228 Headey, A., Pirkis, J., Merner, B., VandenHeuvel, A., Mitchell, P., Robinson, J., Parham, J. & Burgess, P. (2006). A review of 156 local projects funded under Australia's National Suicide Prevention Strategy: Overview and lessons learned. *Australian e-Journal for the Advancement of Mental Health*, vol. 5, no. 3.

## Endnotes (continued)

- 229 Maris, R.W., Berman, A.L. & Silverman, M.M. (2000). Treatment and prevention of suicide. In *Comprehensive textbook of suicidology* (eds R.W. Maris, A.L. Berman & M.M. Silverman), pp. 509-535. New York: Guilford Press.
- 230 Silverman, M.M. & Maris, R.W. (1995). The prevention of suicide-related behaviours: An overview, *Suicide and Life-Threatening Behavior*, vol. 25, pp. 10-21.
- 231 De Leo, D. (2004). Suicide prevention is far more than a psychiatric business. *World Psychiatry*, vol. 3, pp. 155-156.
- 232 De Leo, D. (2002). Why are we not getting any closer to preventing suicide? *British Journal of Psychiatry*, vol. 183, pp. 382-383.
- 233 De Leo, D. (2004). Suicide prevention is far more than a psychiatric business. *World Psychiatry*, vol. 3, pp. 155-156.
- 234 Goldsmith, S.K., Pellmar, T.C., Kleinman, A.M. & Bunney, W.E. (2002). Programs for suicide prevention. In *Reducing suicide: A national imperative* (eds S.K. Goldsmith, T.C. Pellmar, A.M. Kleinman, Bunney, W.E.), pp. 273-328. Washington, DC: National Academic Press.
- 235 De Leo, D. (2002). Why are we not getting any closer to preventing suicide? *British Journal of Psychiatry*, vol. 183, pp.382-383.
- 236 De Leo, D. & Evans, R. (2004). *International Suicide Rates and Prevention Strategies*. Gottingen, Germany: Hogrefe & Hubar Pulishers.
- 237 De Leo, D. (2002). Why are we not getting any closer to preventing suicide? *British Journal of Psychiatry*, vol. 183, pp.382-383.
- 238 Mann, J.J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P. & Hendin, H. (2005). Suicide Prevention Strategies: A Systematic Review, *Journal of the American Medical Association*, vol. 294, no. 16, pp. 2064-2074.
- 239 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 240 Gunnell, D & Frankel, S. (1994). Prevention of suicide: Aspirations and evidence. *British Medical Journal*, vol. 308, pp. 1227-1234.
- 241 Pirkis, J., Burgess, P.M., Francis, C., Blood, R.W. & Jolley, D.J. (2006). The relationship between media reporting of suicide and actual suicide in Australia. *Social Science and Medicine*, vol. 62, no. 11, pp. 2874-2886.
- 242 De Leo, D. (2002). Why are we not getting any closer to preventing suicide? *British Journal of Psychiatry*, vol. 183, pp. 382-383.
- 243 Headey, A., Pirkis, J., Merner, B., VandenHeuvel, A., Mitchell, P., Robinson, J., Parham, J. & Burgess, P. (2006). A review of 156 local projects funded under Australia's National Suicide Prevention Strategy: Overview and lessons learned. *Australian e-Journal for the Advancement of Mental Health*, vol. 5, no. 3.
- 244 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 245 Gunnell, D & Frankel, S. (1994). Prevention of suicide: Aspirations and evidence. *British Medical Journal*, vol. 308, pp. 1227-1234.
- 246 Beautrais, A., Fergusson, D., Coggan, C., Colling, C., Doughty, C., Ellis, P., Hatcher, S., Horwood, J., Merry, S., Mulder, R., Poulton, R. & Surgenor, L. (2007). Effective strategies for suicide prevention in New Zealand: A review of the evidence. *New Zealand Medical Journal*, vol. 120, no. 1251, pp. U2459.
- 247 Commonwealth of Australia (2006). *National Activities in Suicide Bereavement Project*. Department of Health and Ageing, Canberra.
- 248 Central Coast Suicide Safety Network (2005). *Suicide on the Central Coast*.
- 249 Commonwealth of Australia; (2001); *Evaluation: A guide for good practice*; National Mental Health Strategy; Living Is For Everyone (LIFE); Department of Health and Ageing, Canberra.
- 250 Mitchell, P.; Lewis, V.; (2003); *A Manual to Guide Development of Local Evaluation Plans: Evaluation within the LIFE Framework using a program logic approach*; Australia Government Department of Health and Ageing, Canberra.



# Acknowledgements

The Living Is For Everyone suite of documents have been prepared for the Department of Health and Ageing by a consortium of organisations supported by a wide network of specialist consultants, advisers and community consultations.

The lead consultants were Corporate Diagnostics Pty Ltd, United Synergies Ltd, Professor Graham Martin and Dr. Judith Murray (University of Queensland) and Greengage Research and Communications. Additional editing and review were provided by NOVA Public Policy Pty Ltd.

The main sub-consultants were Professor John Mendoza, Associate Professor Nicholas Procter, Sunrise Solutions, GKY Internet, Auseinet, the Australian Institute for Suicide Research and Prevention (AISRAP, Griffith University), Oxygen Kiosk, DDSN Interactive and the Four Design Group.

Specialist advisers who commented on and assisted with various drafts during the project included Professor Beverley Raphael, Professor Diego De Leo, Professor Ian Webster, Trevor Hazell, Professor Don Zoellner, Professor Edward White, Professor Ernest Hunter, Dr. Karolina Kryszyska, Lorraine Wheeler, Dr. Angela Kirsner, Susan Beaton, Dr. Michael Dudley, Dr. Don Spencer and John Arms (NSW Central Coast Coroner).

The diversity reference group to the project were Jill Fisher (Chair), Mick Adams, Melba Townsend, Travis Shorey, Nooria Mehraby, Julian Krieg, Gerald Wyatt, Hilary Knack and Samantha Harrison.

The following three Australian Government advisory committees contributed to the development of the Living Is For Everyone Resources:

The National Advisory Council on Suicide Prevention;

The Community and Expert Advisory Forum; and

The Indigenous Strategies Working Group.

There were many hundreds of people who attended the community consultations.





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